FIG. 1

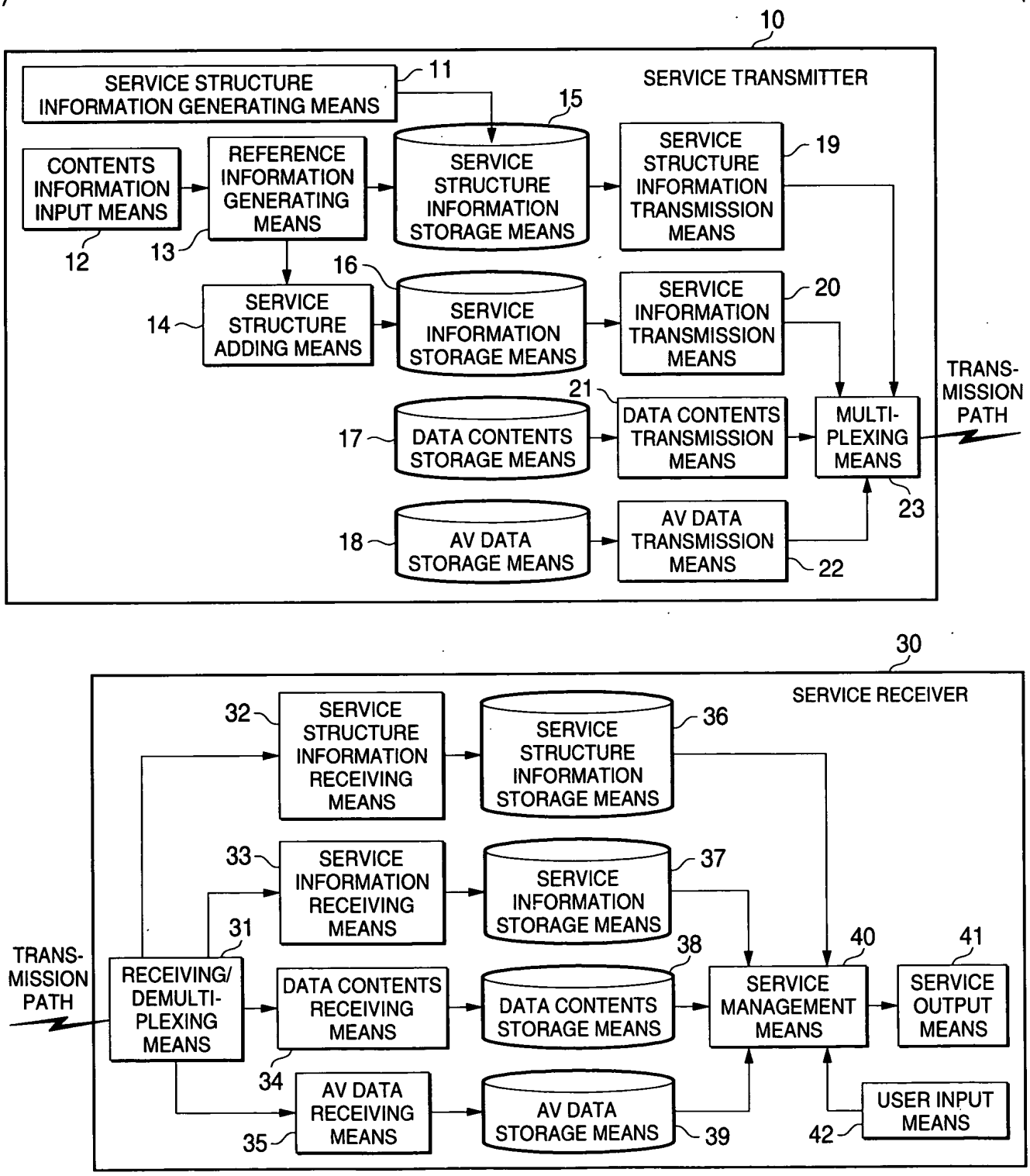

10
SERVICE TRANSMITTER
SERVICE STRUCTURE INFORMATION GENERATING MEANS
11
15
CONTENTS INFORMATION INPUT MEANS
12
REFERENCE INFORMATION GENERATING MEANS
13
SERVICE STRUCTURE INFORMATION STORAGE MEANS
SERVICE STRUCTURE INFORMATION TRANSMISSION MEANS
19
16
SERVICE STRUCTURE ADDING MEANS
14
SERVICE INFORMATION STORAGE MEANS
SERVICE INFORMATION TRANSMISSION MEANS
20
21
DATA CONTENTS STORAGE MEANS
17
DATA CONTENTS TRANSMISSION MEANS
MULTI-PLEXING MEANS
TRANS-MISSION PATH
23
AV DATA STORAGE MEANS
18
AV DATA TRANSMISSION MEANS
22
30
SERVICE RECEIVER
32
SERVICE STRUCTURE INFORMATION RECEIVING MEANS
SERVICE STRUCTURE INFORMATION STORAGE MEANS
36
33
SERVICE INFORMATION RECEIVING MEANS
SERVICE INFORMATION STORAGE MEANS
37
TRANS-MISSION PATH
31
RECEIVING/ DEMULTI-PLEXING MEANS
DATA CONTENTS RECEIVING MEANS
38
DATA CONTENTS STORAGE MEANS
40
SERVICE MANAGEMENT MEANS
41
SERVICE OUTPUT MEANS
34
AV DATA RECEIVING MEANS
35
AV DATA STORAGE MEANS
39
USER INPUT MEANS
42

FIG. 2

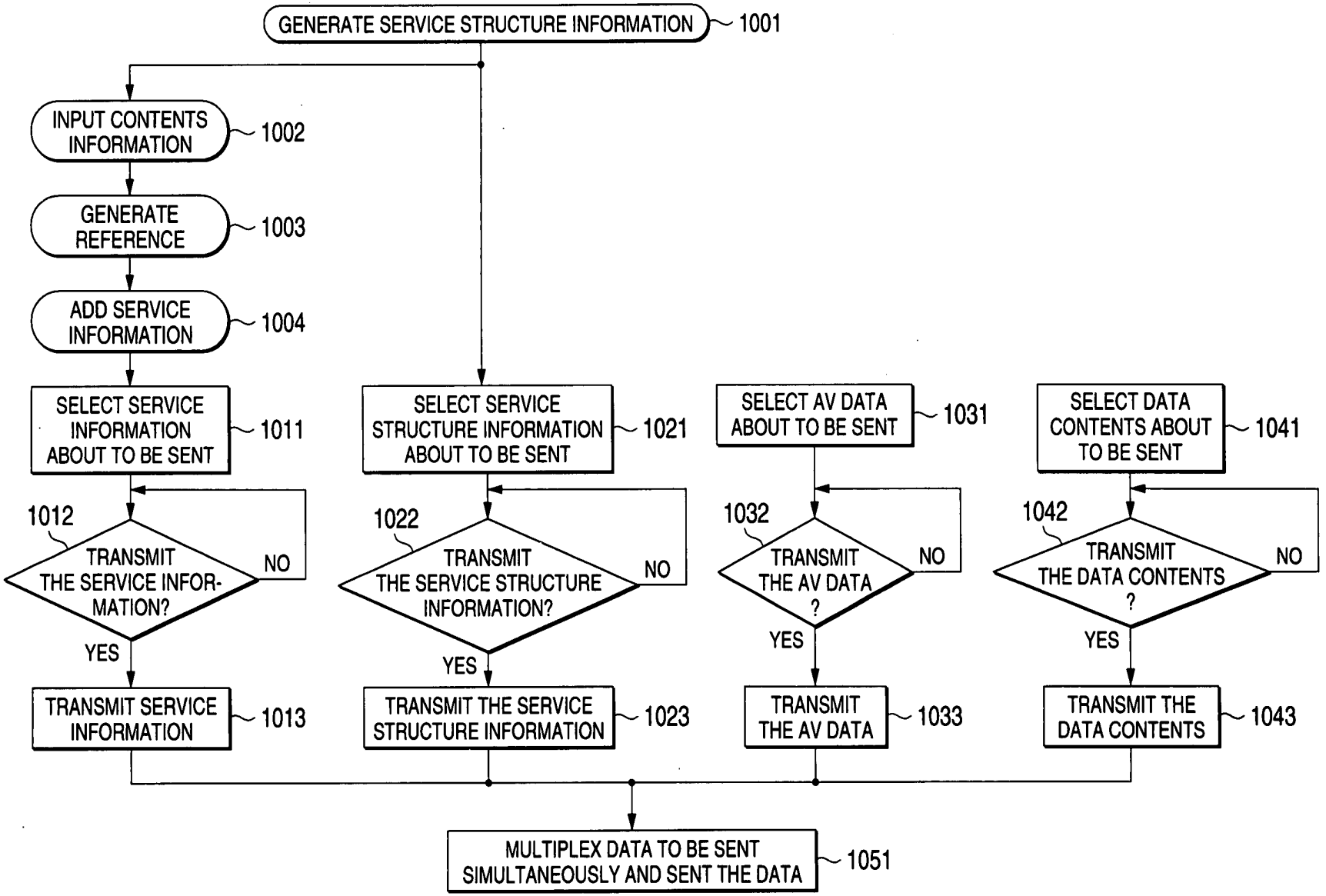

GENERATE SERVICE STRUCTURE INFORMATION
1001
INPUT CONTENTS INFORMATION
1002
GENERATE REFERENCE
1003
ADD SERVICE INFORMATION
1004
SELECT SERVICE INFORMATION ABOUT TO BE SENT
1011
1012
TRANSMIT THE SERVICE INFOR-MATION?
NO
YES
TRANSMIT SERVICE INFORMATION
1013
SELECT SERVICE STRUCTURE INFORMATION ABOUT TO BE SENT
1021
1022
TRANSMIT THE SERVICE STRUCTURE INFORMATION?
NO
YES
TRANSMIT THE SERVICE STRUCTURE INFORMATION
1023
SELECT AV DATA ABOUT TO BE SENT
1031
1032
TRANSMIT THE AV DATA ?
NO
YES
TRANSMIT THE AV DATA
1033
SELECT DATA CONTENTS ABOUT TO BE SENT
1041
1042
TRANSMIT THE DATA CONTENTS ?
NO
YES
TRANSMIT THE DATA CONTENTS
1043
MULTIPLEX DATA TO BE SENT SIMULTANEOUSLY AND SENT THE DATA
1051

FIG. 3

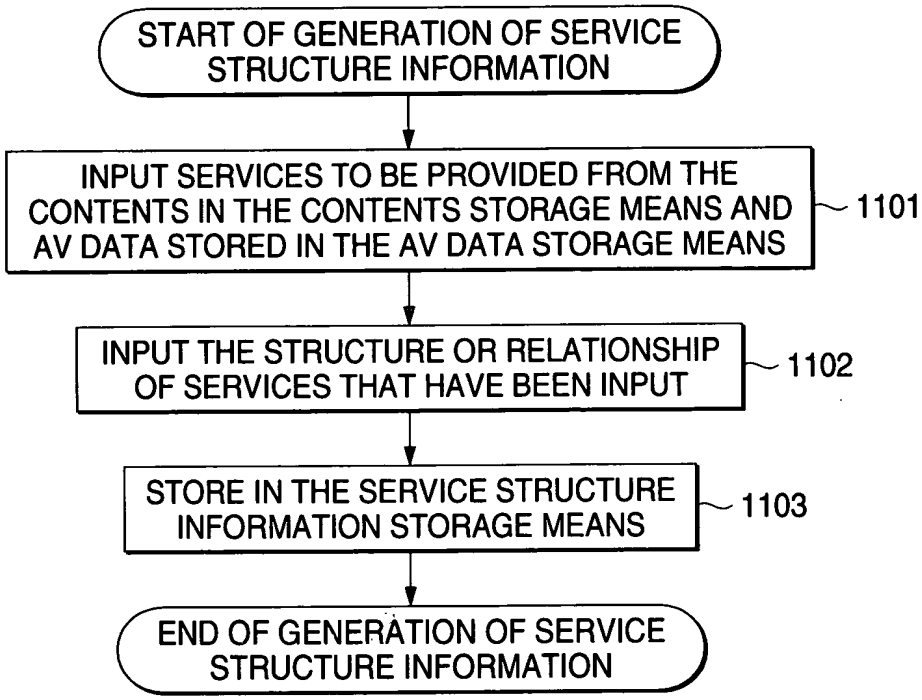

START OF GENERATION OF SERVICE STRUCTURE INFORMATION
INPUT SERVICES TO BE PROVIDED FROM THE CONTENTS IN THE CONTENTS STORAGE MEANS AND AV DATA STORED IN THE AV DATA STORAGE MEANS
1101
INPUT THE STRUCTURE OR RELATIONSHIP OF SERVICES THAT HAVE BEEN INPUT
1102
STORE IN THE SERVICE STRUCTURE INFORMATION STORAGE MEANS
1103
END OF GENERATION OF SERVICE STRUCTURE INFORMATION

FIG. 4

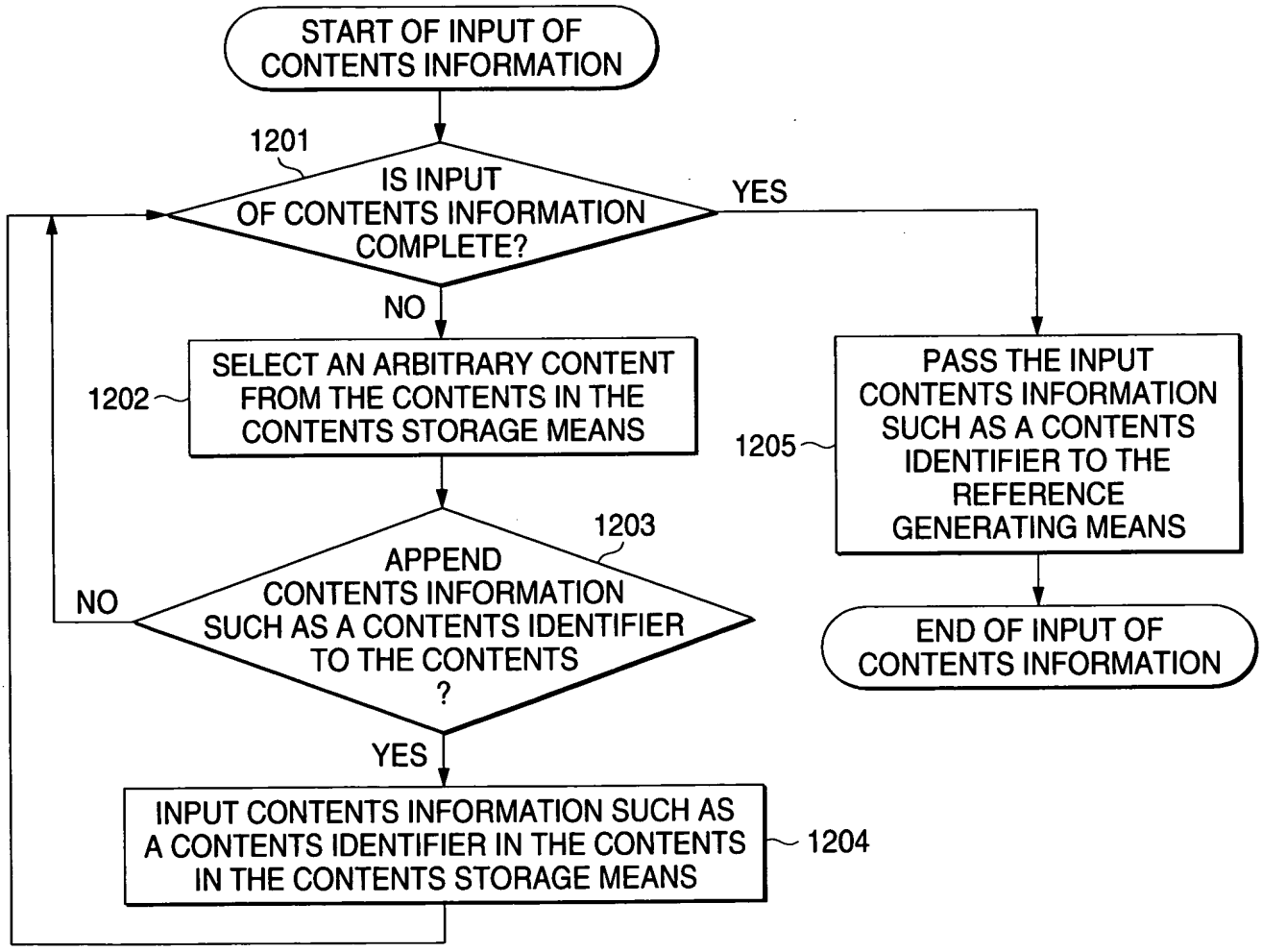

START OF INPUT OF CONTENTS INFORMATION
1201
IS INPUT OF CONTENTS INFORMATION COMPLETE?
YES
NO
1202
SELECT AN ARBITRARY CONTENT FROM THE CONTENTS IN THE CONTENTS STORAGE MEANS
1205
PASS THE INPUT CONTENTS INFORMATION SUCH AS A CONTENTS IDENTIFIER TO THE REFERENCE GENERATING MEANS
1203
APPEND CONTENTS INFORMATION SUCH AS A CONTENTS IDENTIFIER TO THE CONTENTS ?
NO
YES
END OF INPUT OF CONTENTS INFORMATION
INPUT CONTENTS INFORMATION SUCH AS A CONTENTS IDENTIFIER IN THE CONTENTS IN THE CONTENTS STORAGE MEANS
1204

FIG. 5

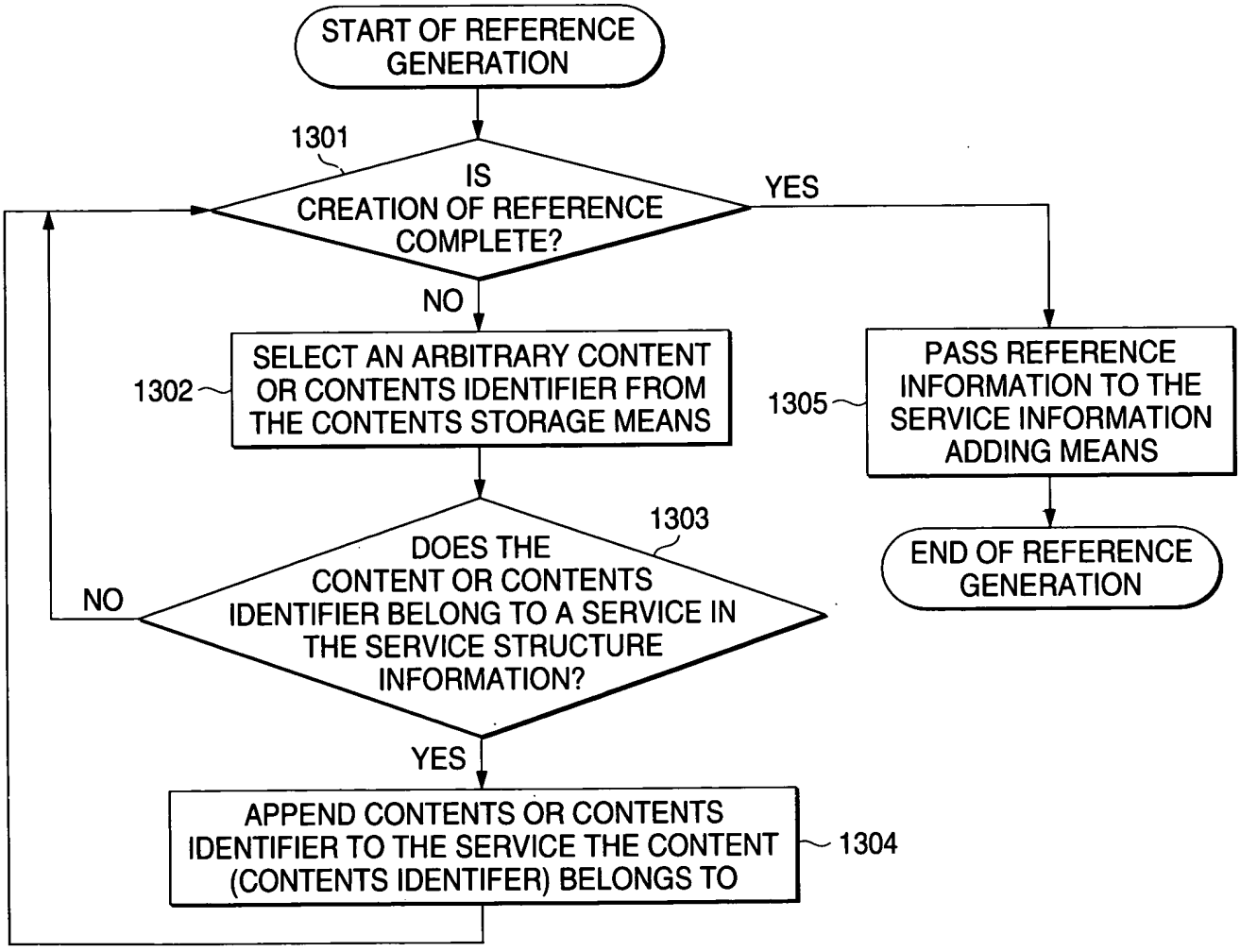

START OF REFERENCE GENERATION
1301
IS CREATION OF REFERENCE COMPLETE?
YES
NO
1302
SELECT AN ARBITRARY CONTENT OR CONTENTS IDENTIFIER FROM THE CONTENTS STORAGE MEANS
1305
PASS REFERENCE INFORMATION TO THE SERVICE INFORMATION ADDING MEANS
END OF REFERENCE GENERATION
1303
DOES THE CONTENT OR CONTENTS IDENTIFIER BELONG TO A SERVICE IN THE SERVICE STRUCTURE INFORMATION?
NO
YES
APPEND CONTENTS OR CONTENTS IDENTIFIER TO THE SERVICE THE CONTENT (CONTENTS IDENTIFER) BELONGS TO
1304

FIG. 6

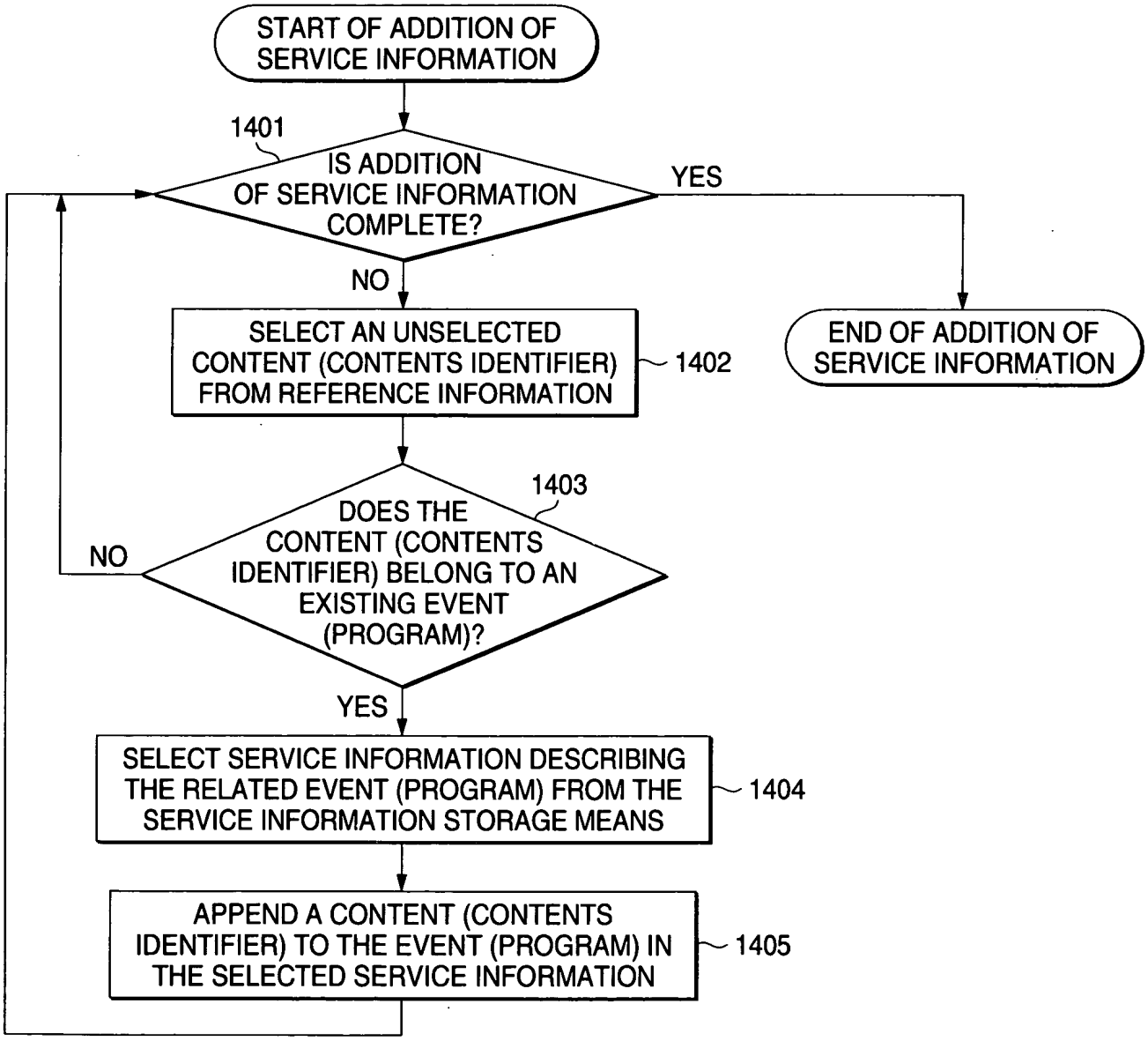
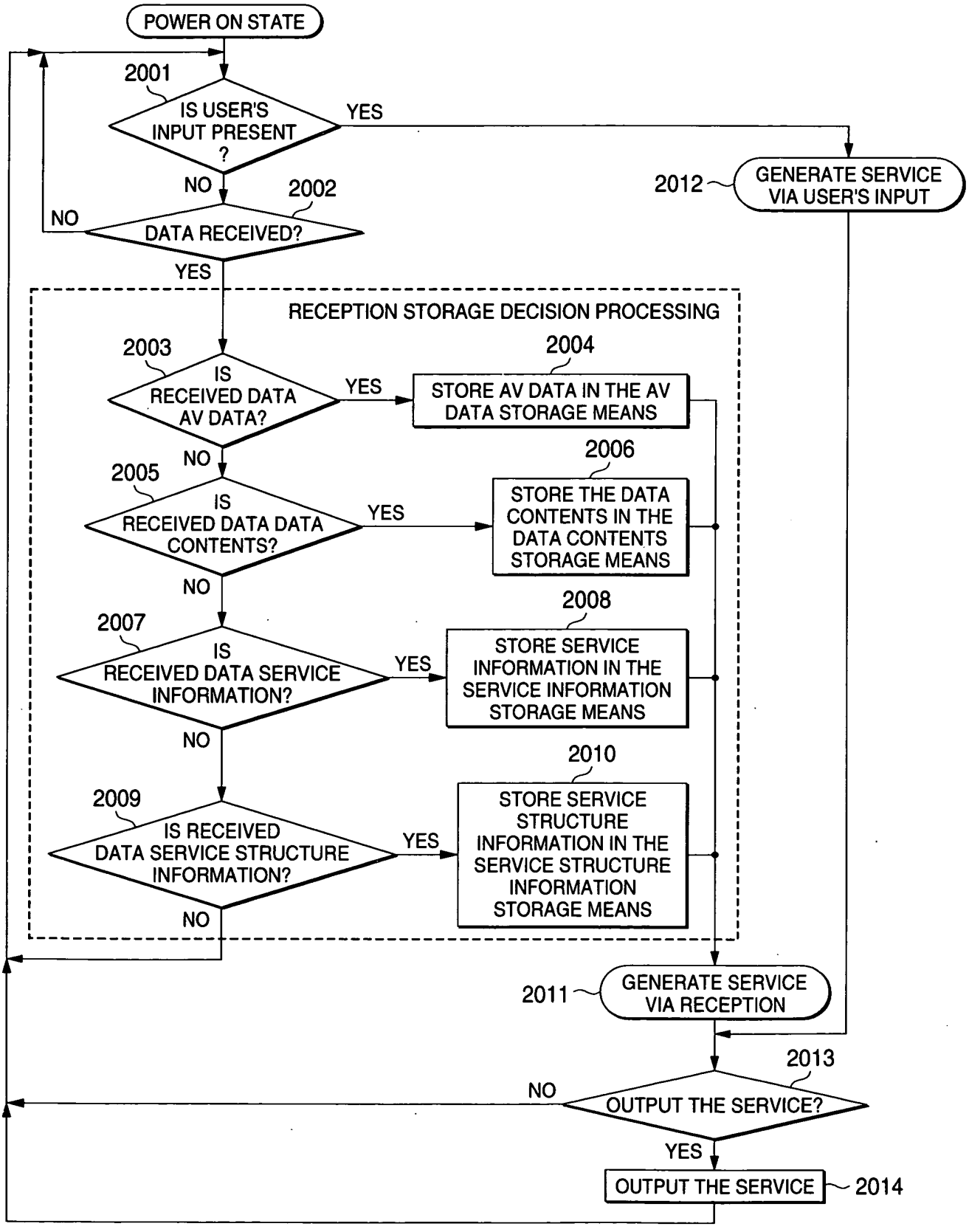

START OF ADDITION OF SERVICE INFORMATION
1401
IS ADDITION OF SERVICE INFORMATION COMPLETE?
YES
NO
END OF ADDITION OF SERVICE INFORMATION
SELECT AN UNSELECTED CONTENT (CONTENTS IDENTIFIER) FROM REFERENCE INFORMATION
1402
1403
DOES THE CONTENT (CONTENTS IDENTIFIER) BELONG TO AN EXISTING EVENT (PROGRAM)?
NO
YES
SELECT SERVICE INFORMATION DESCRIBING THE RELATED EVENT (PROGRAM) FROM THE SERVICE INFORMATION STORAGE MEANS
1404
APPEND A CONTENT (CONTENTS IDENTIFIER) TO THE EVENT (PROGRAM) IN THE SELECTED SERVICE INFORMATION
1405

FIG. 7


POWER ON STATE
2001
IS USER'S INPUT PRESENT ?
YES
NO
2002
DATA RECEIVED?
NO
YES
2012
GENERATE SERVICE VIA USER'S INPUT
RECEPTION STORAGE DECISION PROCESSING
2003
IS RECEIVED DATA AV DATA?
YES
2004
STORE AV DATA IN THE AV DATA STORAGE MEANS
NO
2005
IS RECEIVED DATA DATA CONTENTS?
YES
2006
STORE THE DATA CONTENTS IN THE DATA CONTENTS STORAGE MEANS
NO
2007
IS RECEIVED DATA SERVICE INFORMATION?
YES
2008
STORE SERVICE INFORMATION IN THE SERVICE INFORMATION STORAGE MEANS
NO
2009
IS RECEIVED DATA SERVICE STRUCTURE INFORMATION?
YES
2010
STORE SERVICE STRUCTURE INFORMATION IN THE SERVICE STRUCTURE INFORMATION STORAGE MEANS
NO
2011
GENERATE SERVICE VIA RECEPTION
2013
OUTPUT THE SERVICE?
NO
YES
OUTPUT THE SERVICE
2014

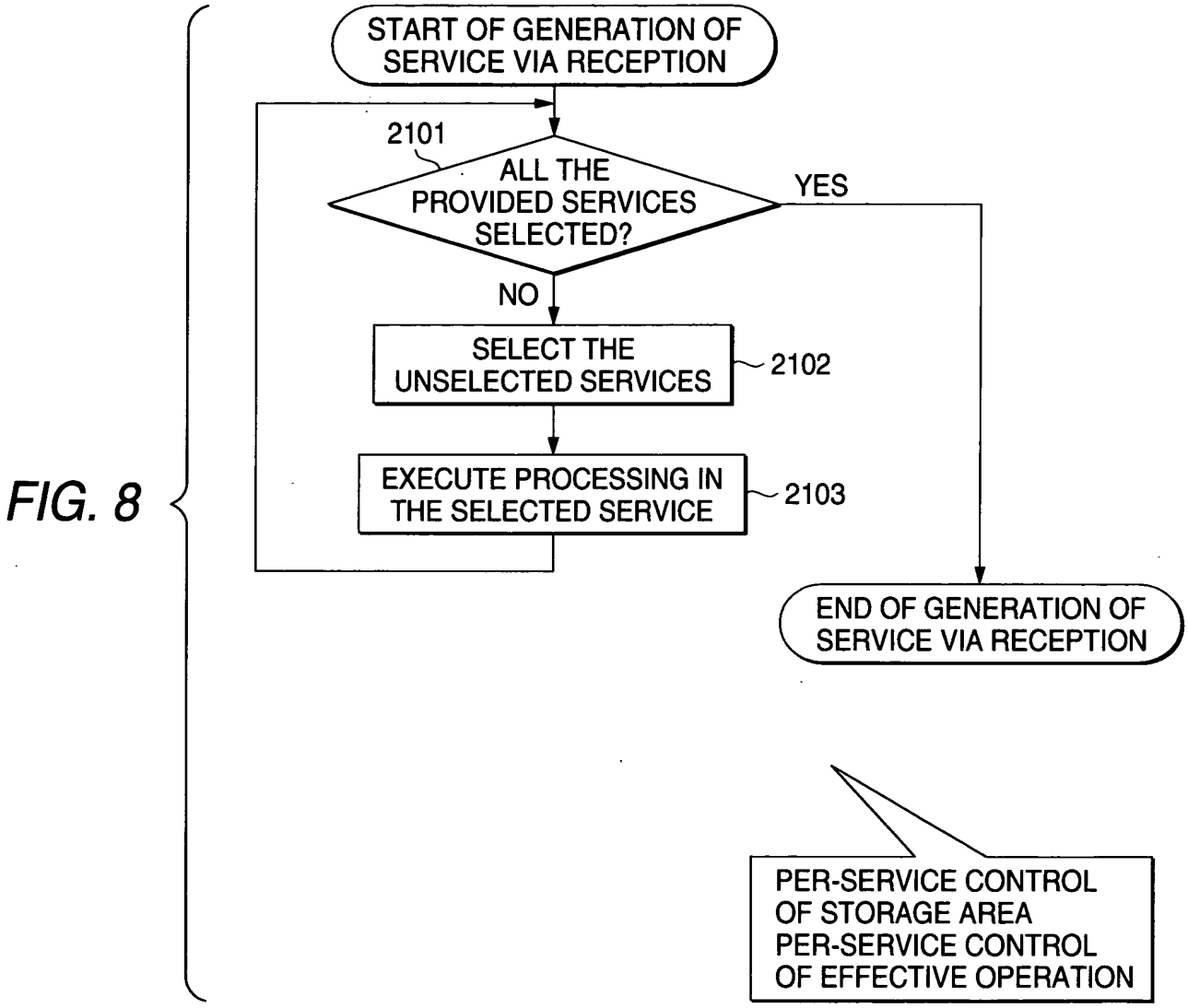


FIG. 8

FIG. 9

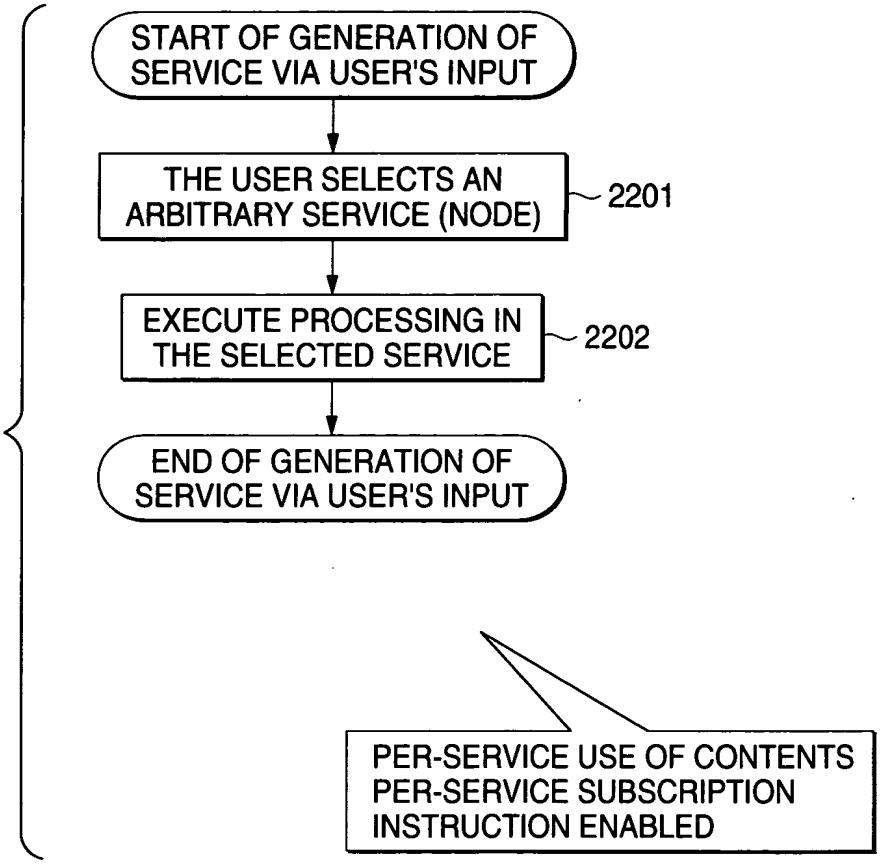


FIG. 10

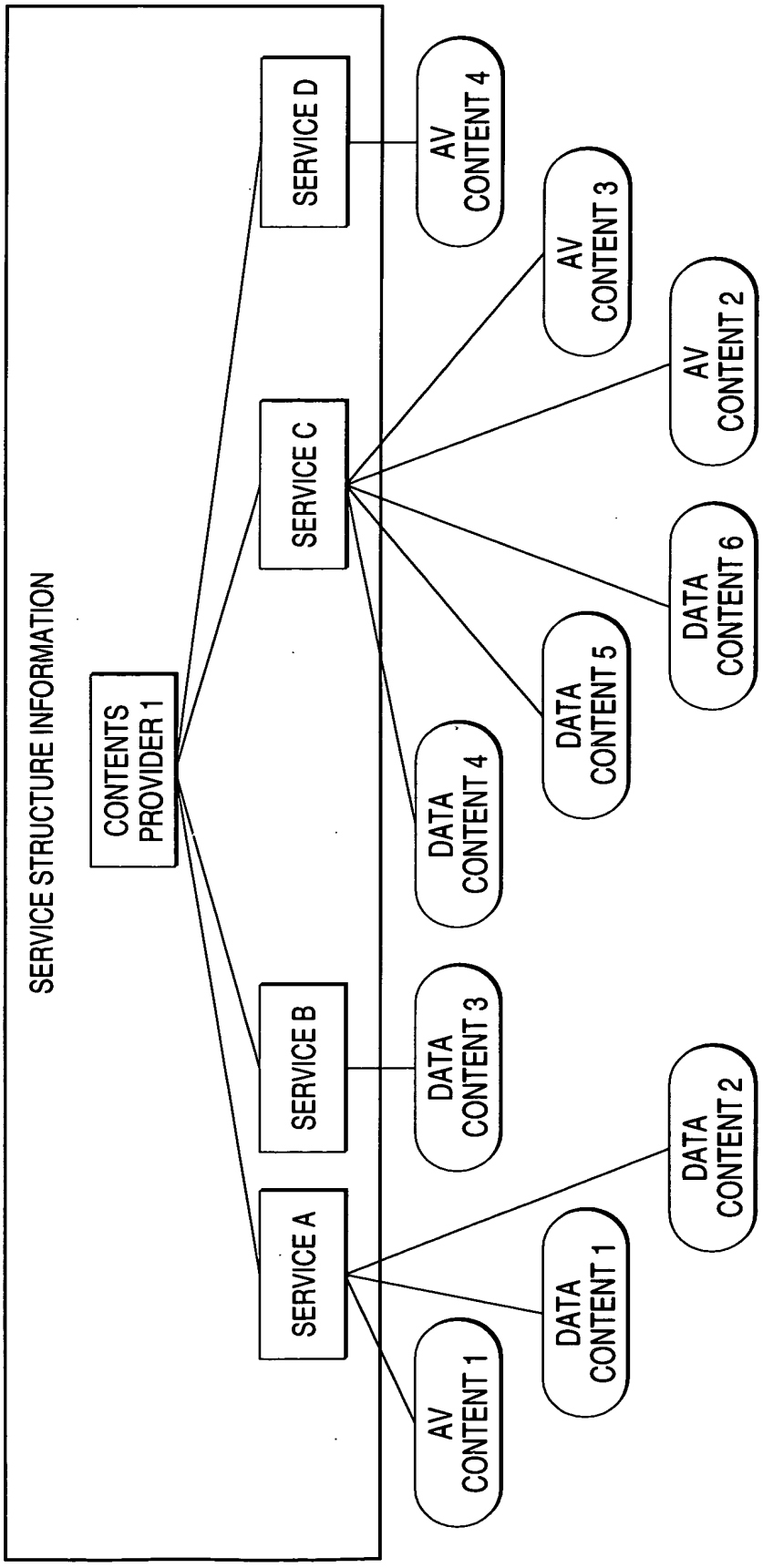

SERVICE STRUCTURE INFORMATION
CONTENTS PROVIDER 1
SERVICE A
SERVICE B
SERVICE C
SERVICE D
AV CONTENT 1
DATA CONTENT 1
DATA CONTENT 2
DATA CONTENT 3
DATA CONTENT 4
DATA CONTENT 5
DATA CONTENT 6
AV CONTENT 2
AV CONTENT 3
AV CONTENT 4

FIG. 11

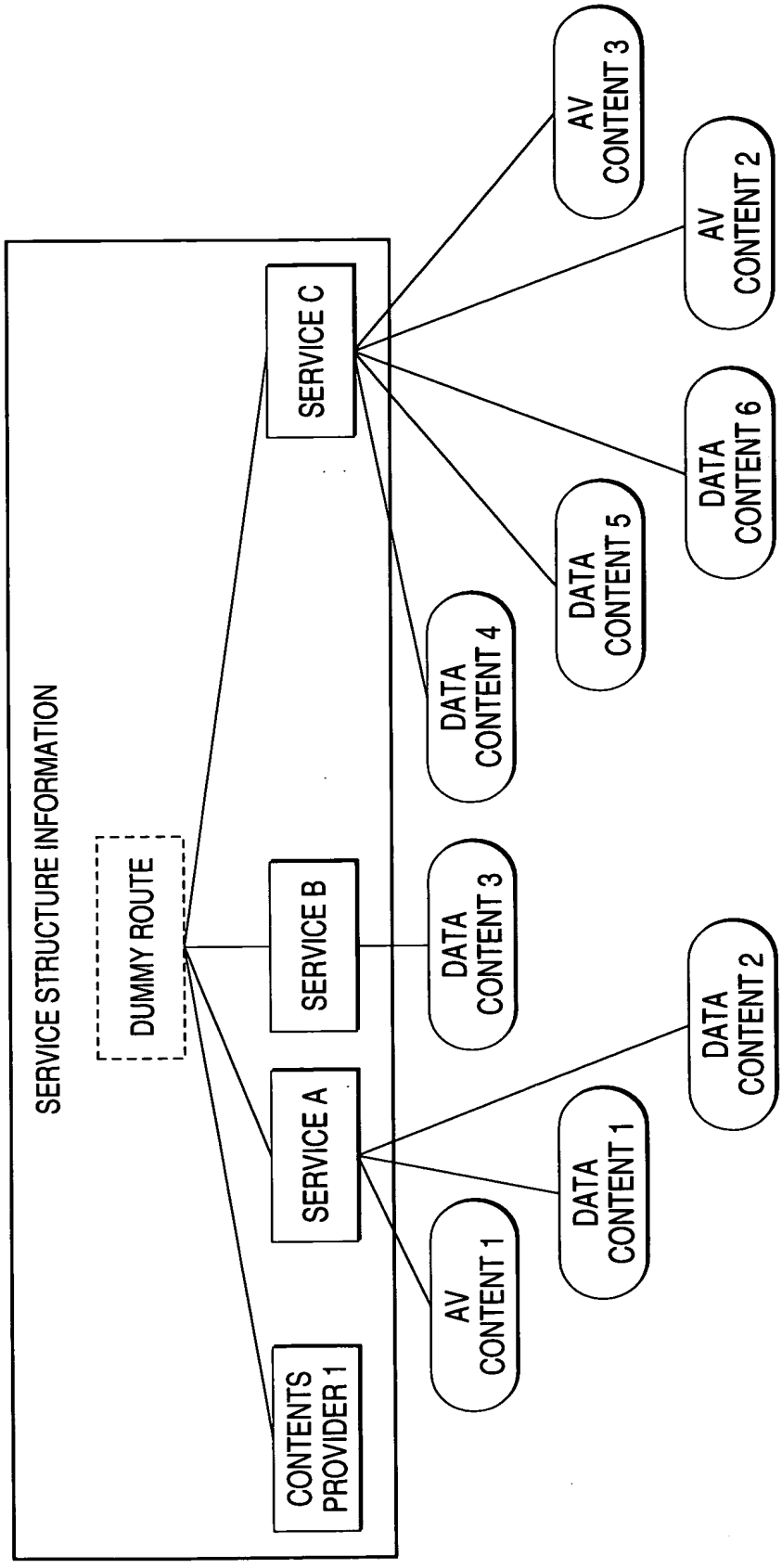


FIG. 12

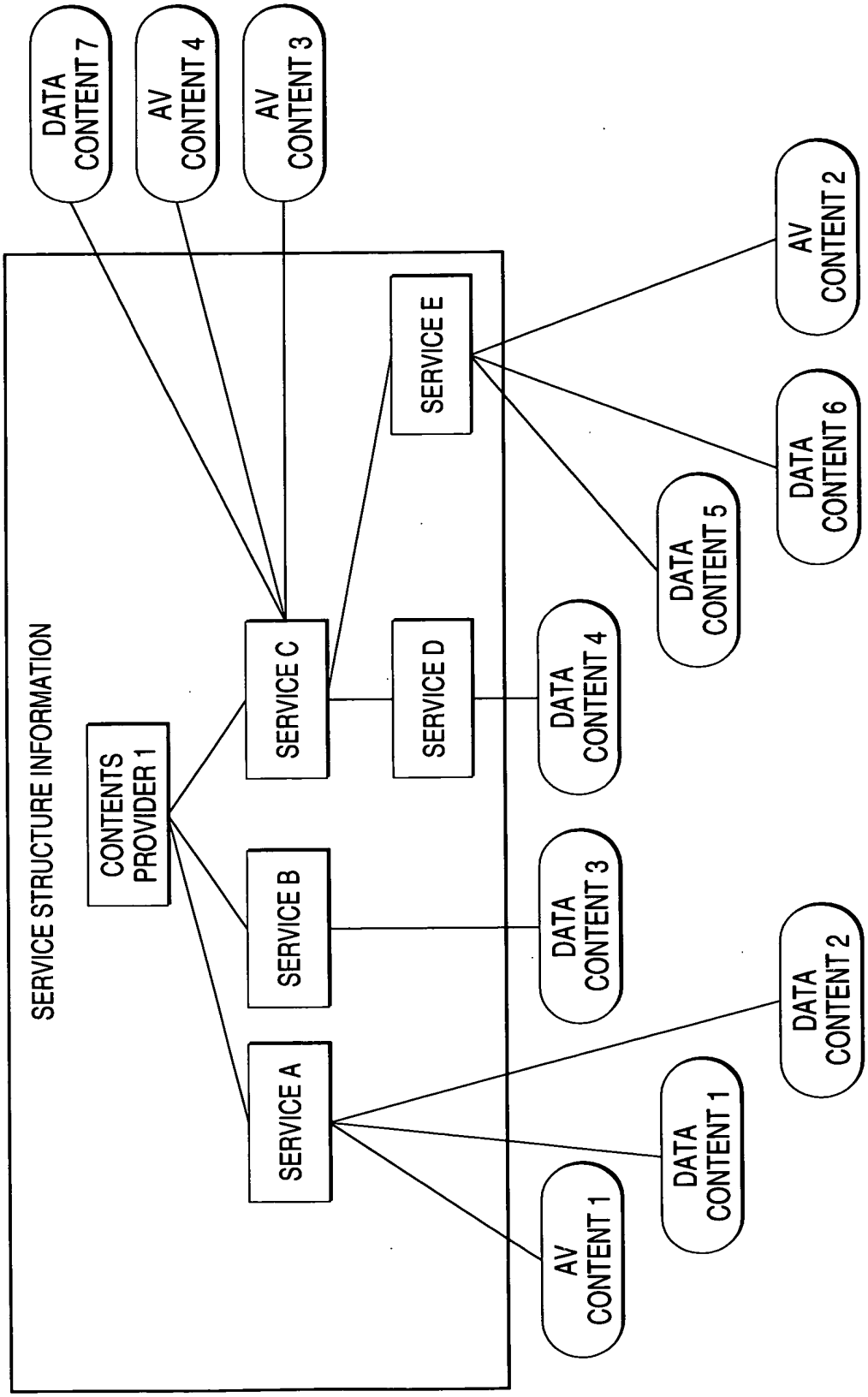

SERVICE STRUCTURE INFORMATION
CONTENTS PROVIDER 1
SERVICE A
SERVICE B
SERVICE C
SERVICE D
SERVICE E
DATA CONTENT 7
AV CONTENT 4
AV CONTENT 3
AV CONTENT 1
DATA CONTENT 1
DATA CONTENT 2
DATA CONTENT 3
DATA CONTENT 4
DATA CONTENT 5
DATA CONTENT 6
AV CONTENT 2

FIG. 13

HOME NODE	PARENT NODE
CONTENTS PROVIDER 1	
SERVICE A	CONTENTS PROVIDER 1
SERVICE B	CONTENTS PROVIDER 1
SERVICE C	CONTENTS PROVIDER 1
SERVICE D	CONTENTS PROVIDER 1

FIG. 14

HOME NODE		REFERENCE DESTINATION
DATA CONTENT 1		SERVICE A
DATA CONTENT 2		SERVICE A
DATA CONTENT 3		SERVICE B
DATA CONTENT 4		SERVICE C
DATA CONTENT 5		SERVICE C
DATA CONTENT 6		SERVICE C
AV CONTENT 1		SERVICE A
AV CONTENT 2		SERVICE C
AV CONTENT 3		SERVICE C
AV CONTENT 4		SERVICE D

FIG. 15

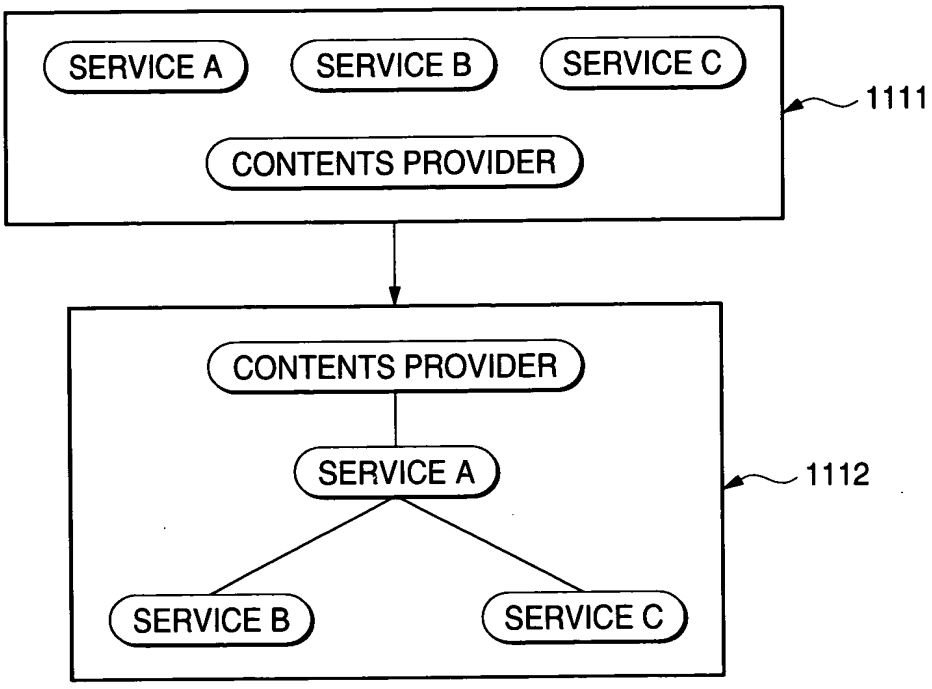


FIG. 16

HOME NODE	PARENT NODE
CONTENTS PROVIDER	
SERVICE A	CONTENTS PROVIDER
SERVICE B	SERVICE A
SERVICE C	SERVICE A

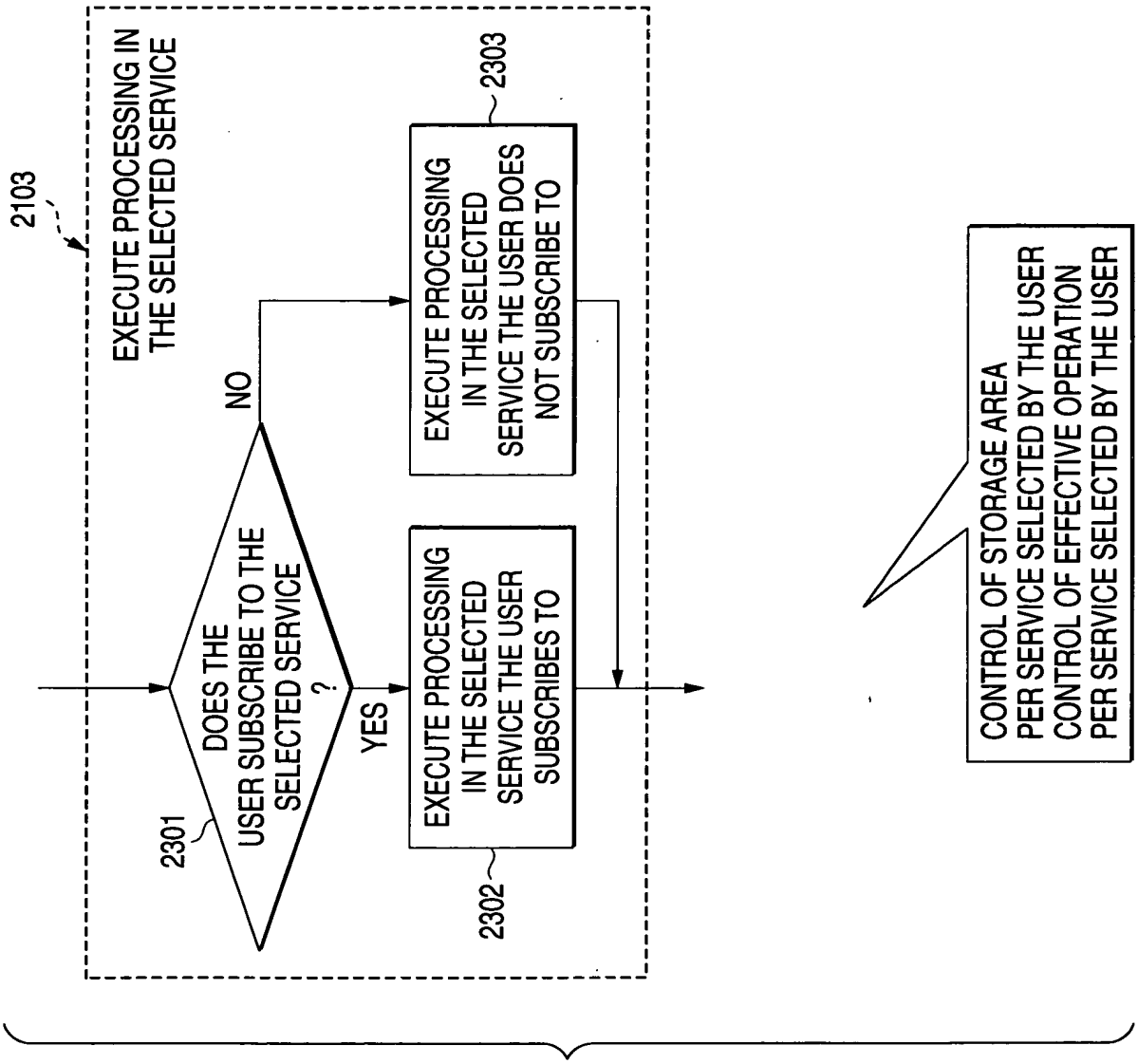
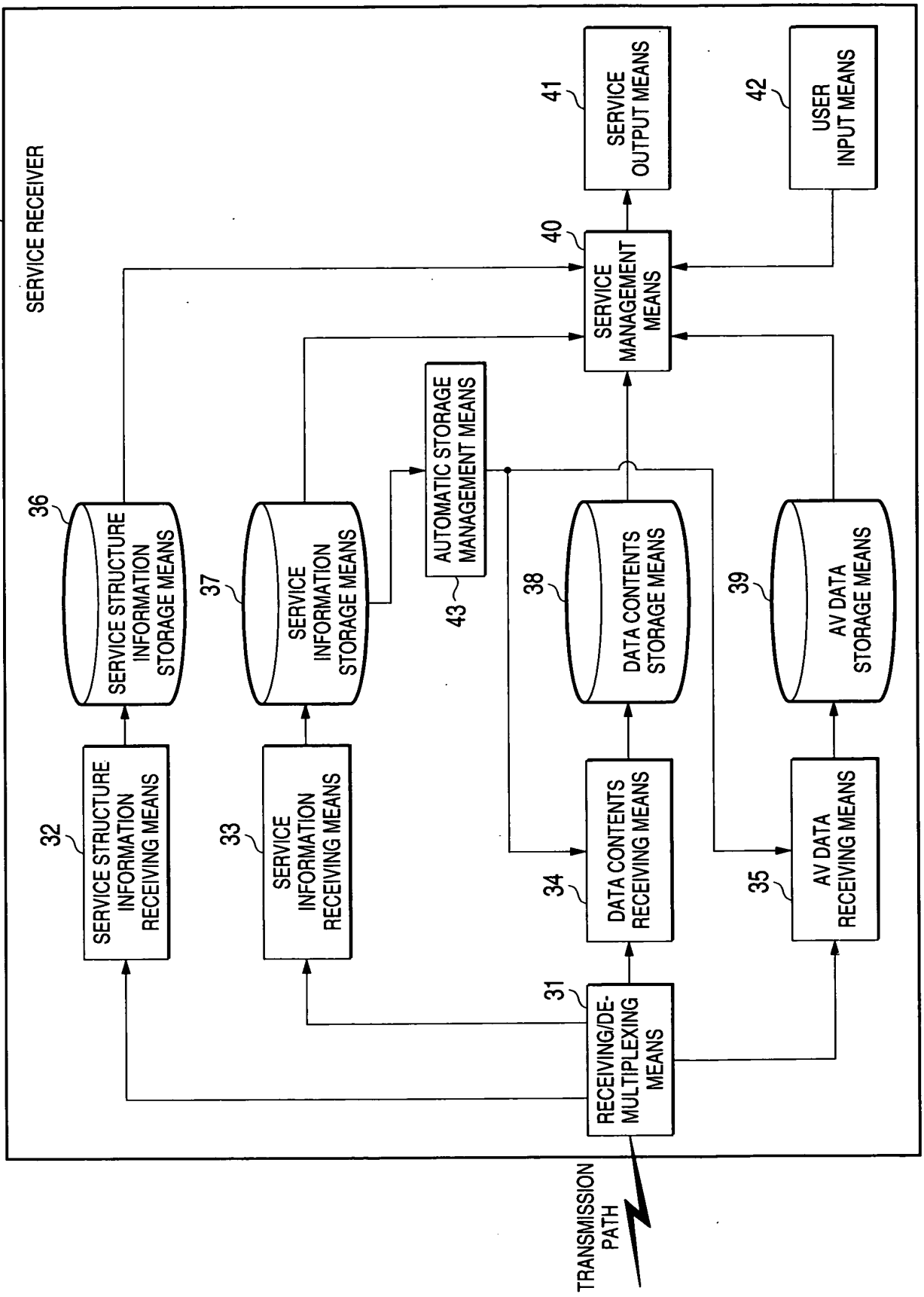

2103
EXECUTE PROCESSING IN THE SELECTED SERVICE
DOES THE USER SUBSCRIBE TO THE SELECTED SERVICE ?
2301
NO
YES
EXECUTE PROCESSING IN THE SELECTED SERVICE THE USER SUBSCRIBES TO
2302
EXECUTE PROCESSING IN THE SELECTED SERVICE THE USER DOES NOT SUBSCRIBE TO
2303
CONTROL OF STORAGE AREA PER SERVICE SELECTED BY THE USER
CONTROL OF EFFECTIVE OPERATION PER SERVICE SELECTED BY THE USER

FIG. 17

FIG. 18


30
SERVICE RECEIVER
41
SERVICE OUTPUT MEANS
42
USER INPUT MEANS
40
SERVICE MANAGEMENT MEANS
36
SERVICE STRUCTURE INFORMATION STORAGE MEANS
37
SERVICE INFORMATION STORAGE MEANS
43
AUTOMATIC STORAGE MANAGEMENT MEANS
38
DATA CONTENTS STORAGE MEANS
39
AV DATA STORAGE MEANS
32
SERVICE STRUCTURE INFORMATION RECEIVING MEANS
33
SERVICE INFORMATION RECEIVING MEANS
34
DATA CONTENTS RECEIVING MEANS
35
AV DATA RECEIVING MEANS
31
RECEIVING/DE-MULTIPLEXING MEANS
TRANSMISSION PATH

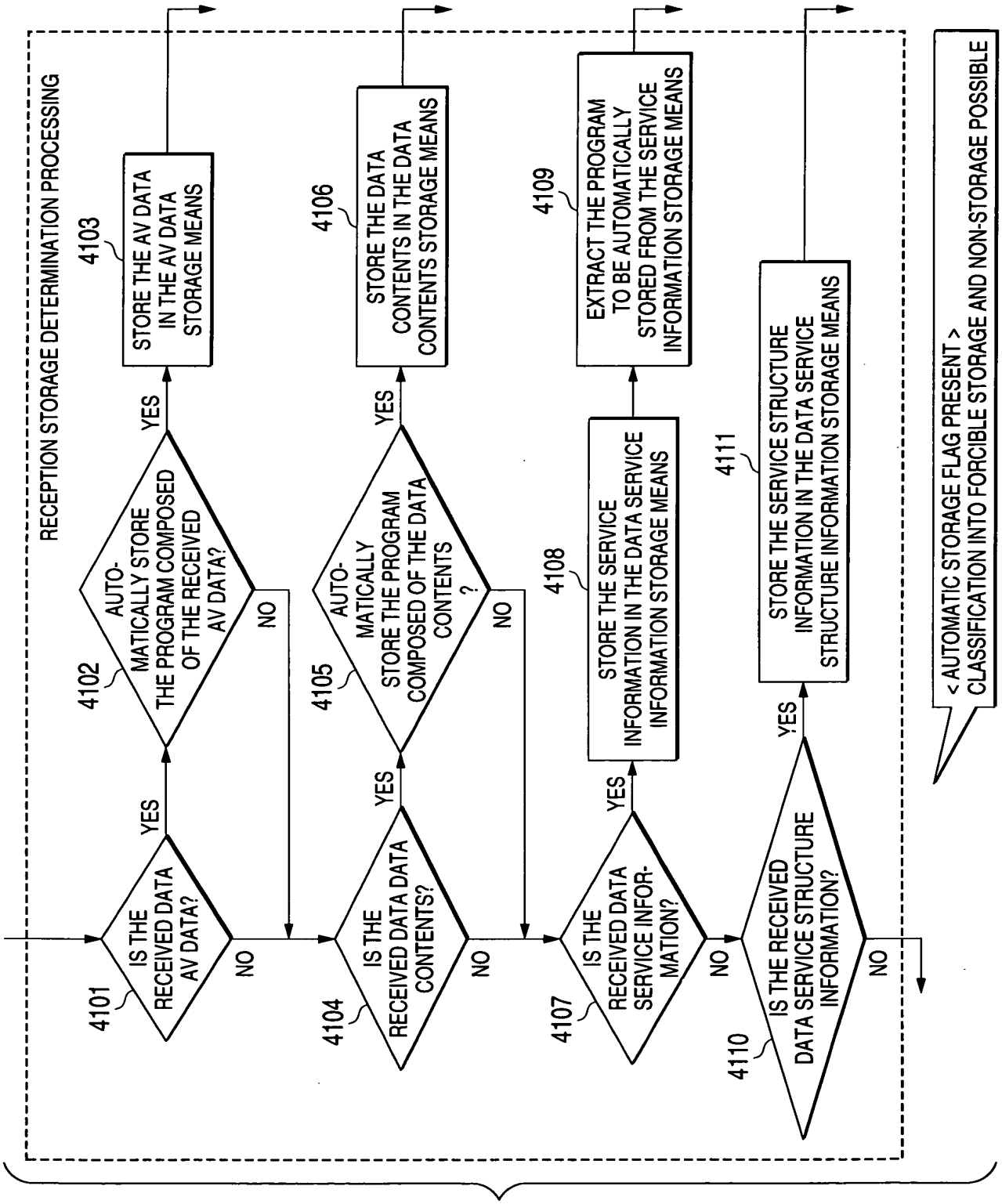

RECEPTION STORAGE DETERMINATION PROCESSING
IS THE RECEIVED DATA AV DATA?
4101
YES
NO
AUTO-MATICALLY STORE THE PROGRAM COMPOSED OF THE RECEIVED AV DATA?
4102
YES
NO
STORE THE AV DATA IN THE AV DATA STORAGE MEANS
4103
IS THE RECEIVED DATA DATA CONTENTS?
4104
YES
NO
AUTO-MATICALLY STORE THE PROGRAM COMPOSED OF THE DATA CONTENTS ?
4105
YES
NO
STORE THE DATA CONTENTS IN THE DATA CONTENTS STORAGE MEANS
4106
IS THE RECEIVED DATA SERVICE INFOR-MATION?
4107
YES
NO
STORE THE SERVICE INFORMATION IN THE DATA SERVICE INFORMATION STORAGE MEANS
4108
EXTRACT THE PROGRAM TO BE AUTOMATICALLY STORED FROM THE SERVICE INFORMATION STORAGE MEANS
4109
IS THE RECEIVED DATA SERVICE STRUCTURE INFORMATION?
4110
YES
NO
STORE THE SERVICE STRUCTURE INFORMATION IN THE DATA SERVICE STRUCTURE INFORMATION STORAGE MEANS
4111
< AUTOMATIC STORAGE FLAG PRESENT >
CLASSIFICATION INTO FORCIBLE STORAGE AND NON-STORAGE POSSIBLE

FIG. 19

FIG. 20

HOME NODE		REFERENCE DESTINATION	AUTOMATIC STORAGE FLAG
DATA CONTENT 1		SERVICE A	○
DATA CONTENT 2		SERVICE A	
DATA CONTENT 3		SERVICE B	
DATA CONTENT 4		SERVICE C	○
DATA CONTENT 5		SERVICE C	
DATA CONTENT 6		SERVICE C	
AV CONTENT 1		SERVICE A	
AV CONTENT 2		SERVICE C	○
AV CONTENT 3		SERVICE C	
AV CONTENT 4		SERVICE D	○

FIG. 21

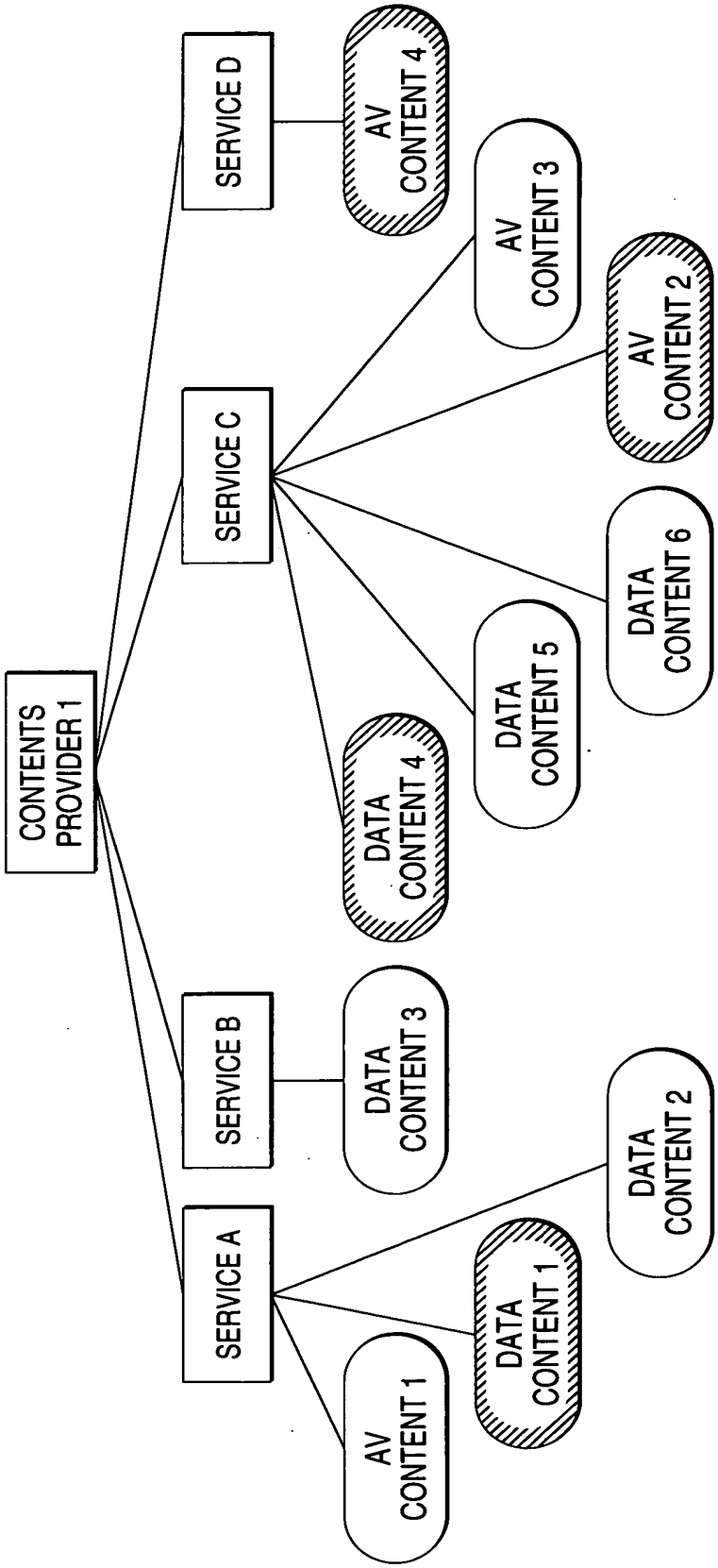


FIG. 22

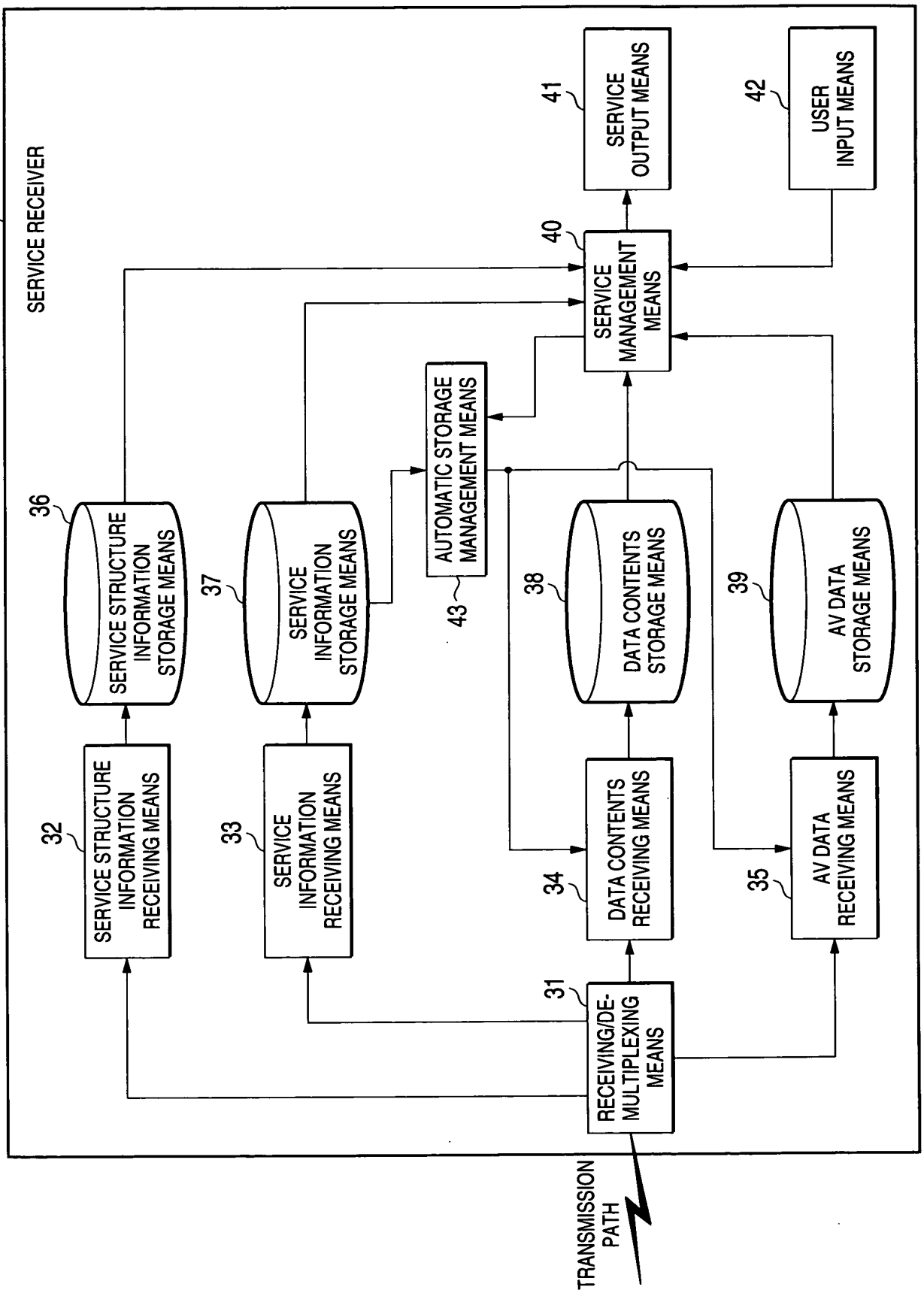

30
SERVICE RECEIVER
41
SERVICE OUTPUT MEANS
42
USER INPUT MEANS
40
SERVICE MANAGEMENT MEANS
AUTOMATIC STORAGE MANAGEMENT MEANS
43
36
SERVICE STRUCTURE INFORMATION STORAGE MEANS
37
SERVICE INFORMATION STORAGE MEANS
38
DATA CONTENTS STORAGE MEANS
39
AV DATA STORAGE MEANS
32
SERVICE STRUCTURE INFORMATION RECEIVING MEANS
33
SERVICE INFORMATION RECEIVING MEANS
34
DATA CONTENTS RECEIVING MEANS
35
AV DATA RECEIVING MEANS
31
RECEIVING/DE-MULTIPLEXING MEANS
TRANSMISSION PATH

FIG. 23

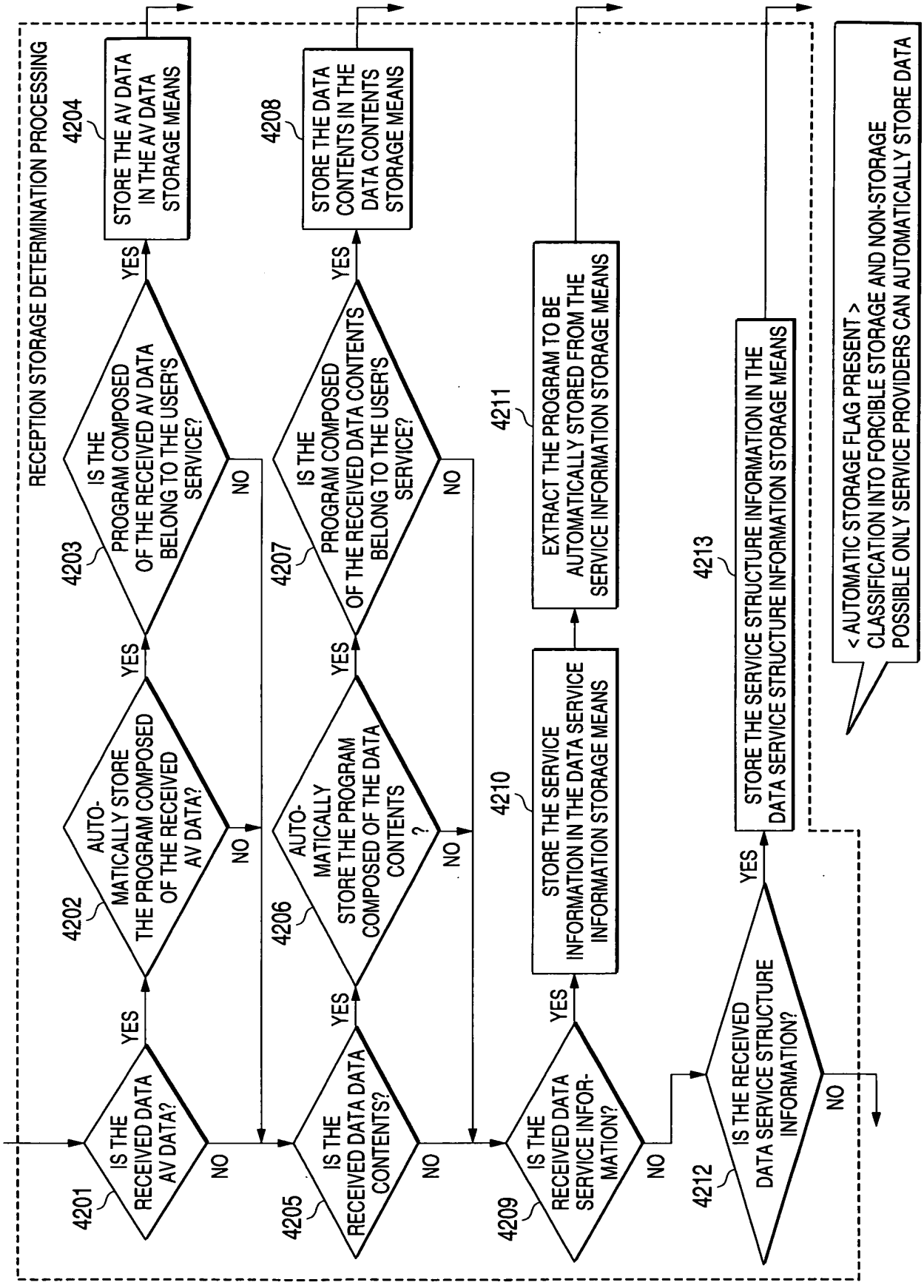

RECEPTION STORAGE DETERMINATION PROCESSING
4201
IS THE RECEIVED DATA AV DATA?
YES
NO
4202
AUTO-MATICALLY STORE THE PROGRAM COMPOSED OF THE RECEIVED AV DATA?
YES
NO
4203
IS THE PROGRAM COMPOSED OF THE RECEIVED AV DATA BELONG TO THE USER'S SERVICE?
YES
NO
4204
STORE THE AV DATA IN THE AV DATA STORAGE MEANS
4205
IS THE RECEIVED DATA DATA CONTENTS?
YES
NO
4206
AUTO-MATICALLY STORE THE PROGRAM COMPOSED OF THE DATA CONTENTS ?
YES
NO
4207
IS THE PROGRAM COMPOSED OF THE RECEIVED DATA CONTENTS BELONG TO THE USER'S SERVICE?
YES
NO
4208
STORE THE DATA CONTENTS IN THE DATA CONTENTS STORAGE MEANS
4209
IS THE RECEIVED DATA SERVICE INFOR-MATION?
YES
NO
4210
STORE THE SERVICE INFORMATION IN THE DATA SERVICE INFORMATION STORAGE MEANS
4211
EXTRACT THE PROGRAM TO BE AUTOMATICALLY STORED FROM THE SERVICE INFORMATION STORAGE MEANS
4212
IS THE RECEIVED DATA SERVICE STRUCTURE INFORMATION?
YES
NO
4213
STORE THE SERVICE STRUCTURE INFORMATION IN THE DATA SERVICE STRUCTURE INFORMATION STORAGE MEANS
< AUTOMATIC STORAGE FLAG PRESENT >
CLASSIFICATION INTO FORCIBLE STORAGE AND NON-STORAGE
POSSIBLE ONLY SERVICE PROVIDERS CAN AUTOMATICALLY STORE DATA

FIG. 24

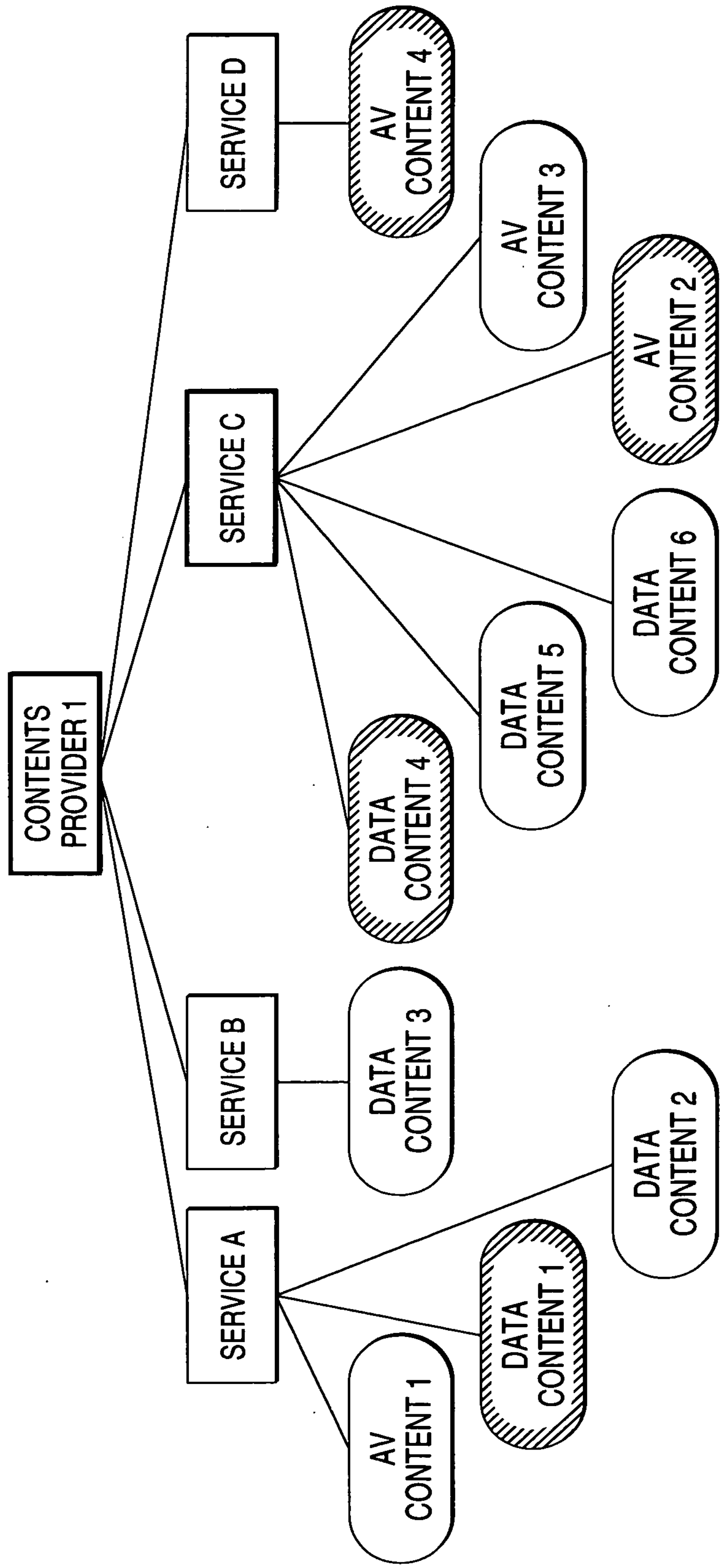


FIG. 25

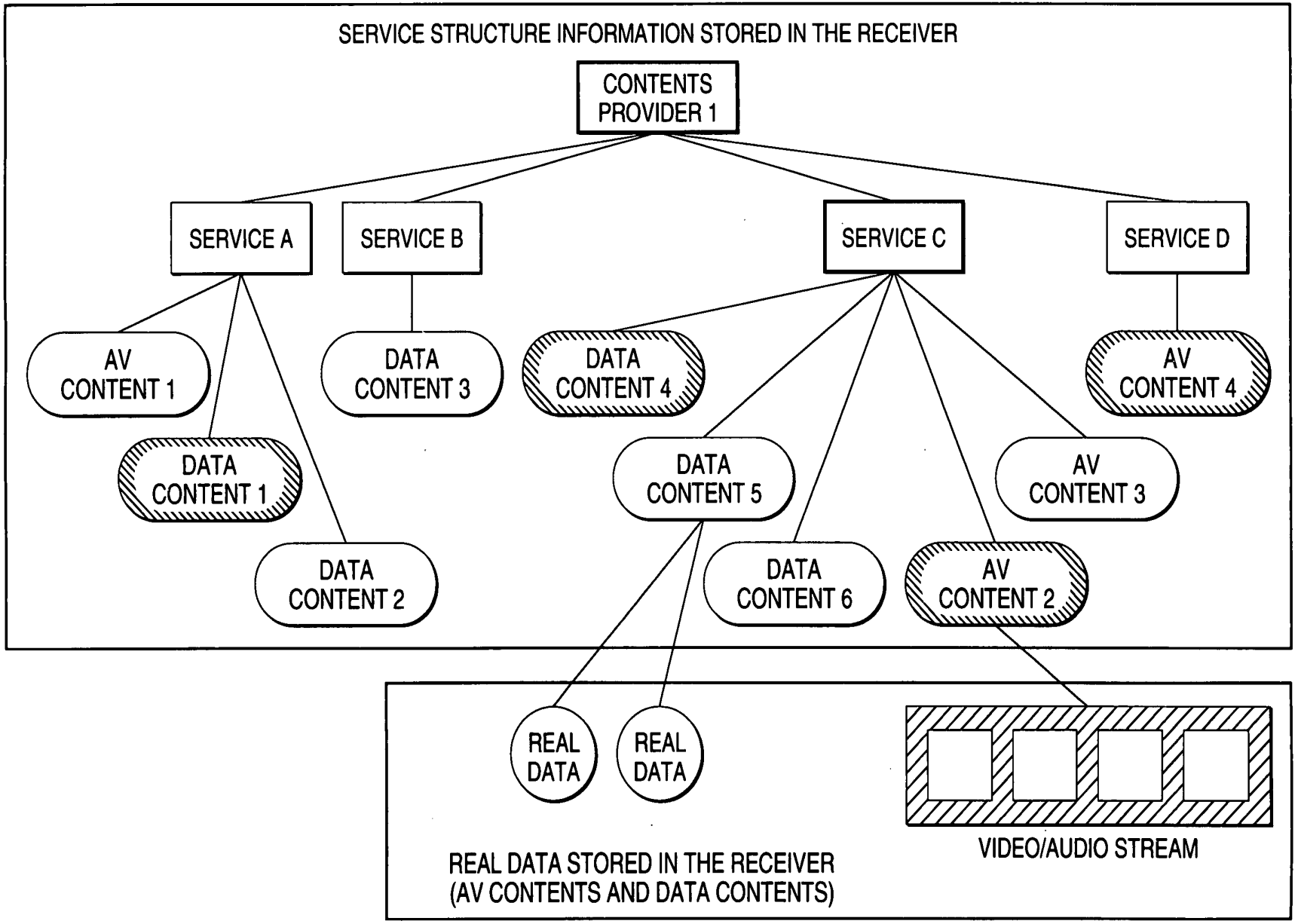


FIG. 26

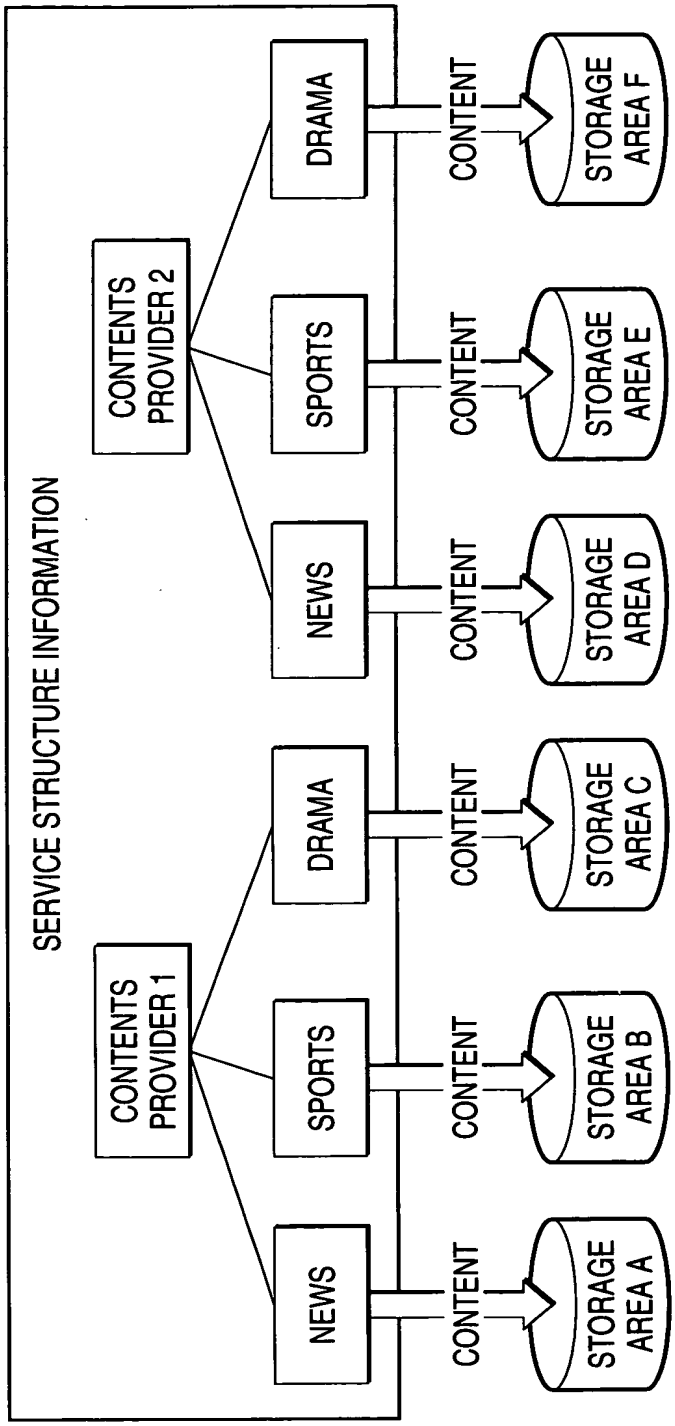
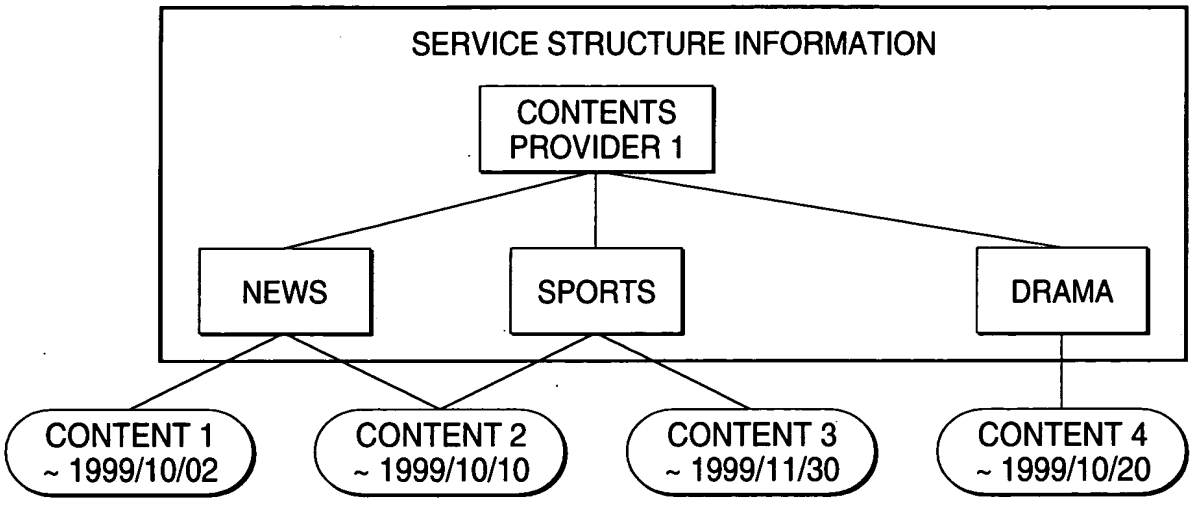

SERVICE STRUCTURE INFORMATION
CONTENTS PROVIDER 1
CONTENTS PROVIDER 2
NEWS
SPORTS
DRAMA
NEWS
SPORTS
DRAMA
CONTENT
CONTENT
CONTENT
CONTENT
CONTENT
CONTENT
STORAGE AREA A
STORAGE AREA B
STORAGE AREA C
STORAGE AREA D
STORAGE AREA E
STORAGE AREA F

FIG. 27



DEPENDS ON THE NEAREST VALIDITY TERM OF CONTENTS:
NEWS: VALID UNTIL 1999/10/02
SPORTS: VALID UNTIL 1999/10/10
DRAMA: VALID UNTIL 1999/10/20

FIG. 28

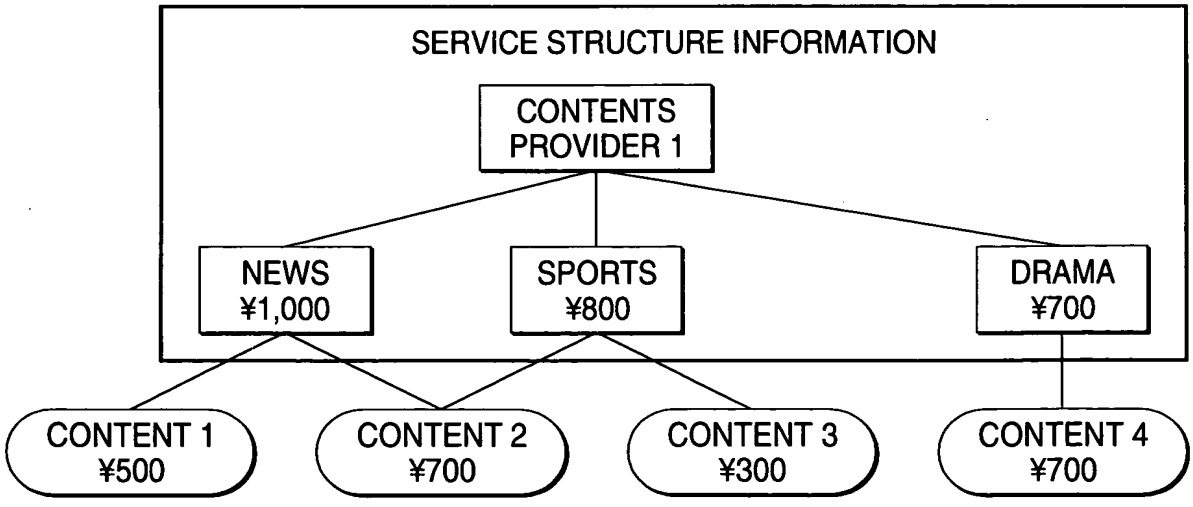


FIG. 29

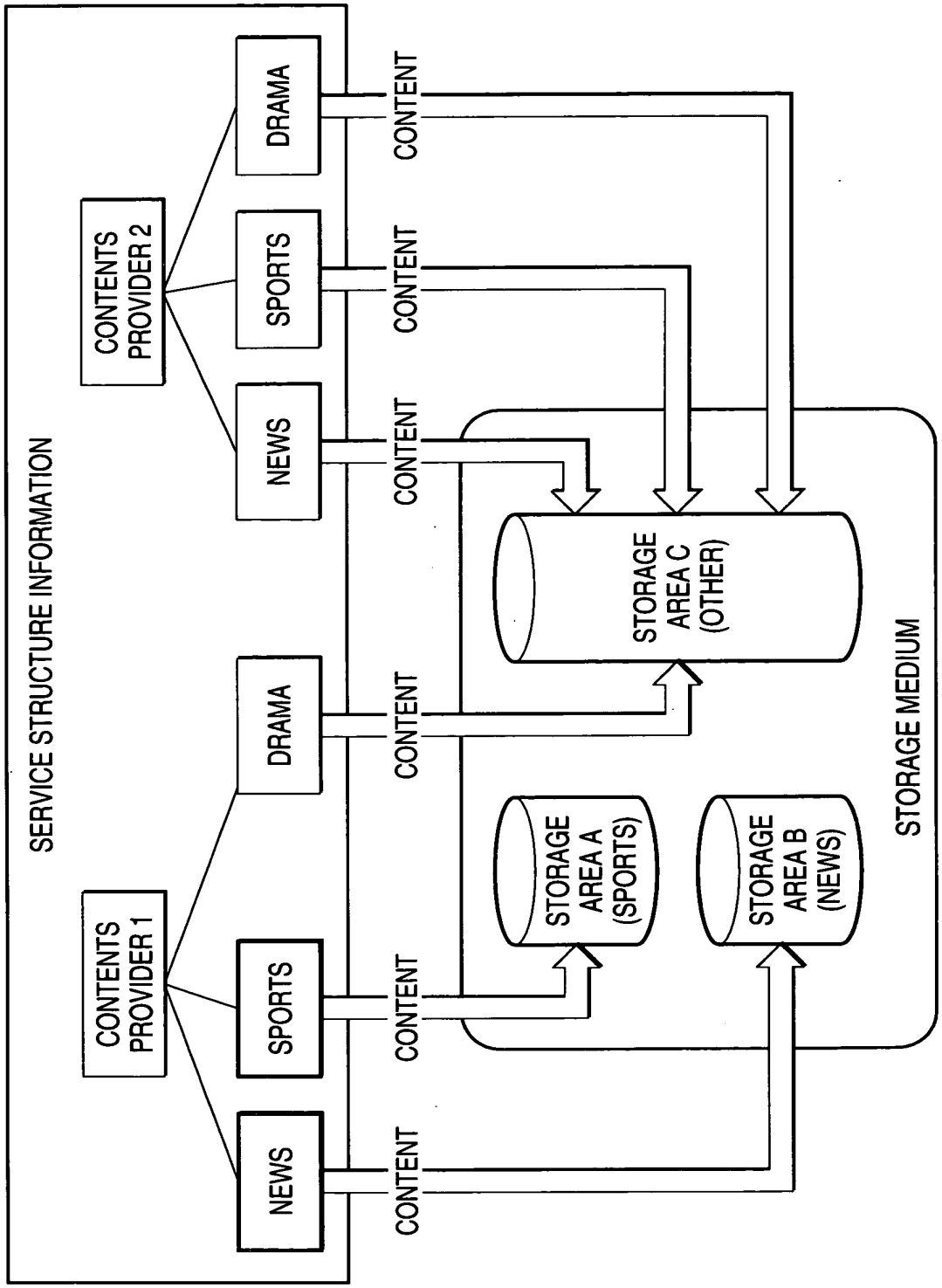

SERVICE STRUCTURE INFORMATION
CONTENTS PROVIDER 1
CONTENTS PROVIDER 2
DRAMA
SPORTS
NEWS
DRAMA
SPORTS
NEWS
CONTENT
CONTENT
CONTENT
CONTENT
CONTENT
CONTENT
STORAGE AREA C (OTHER)
STORAGE AREA A (SPORTS)
STORAGE AREA B (NEWS)
STORAGE MEDIUM

FIG. 30

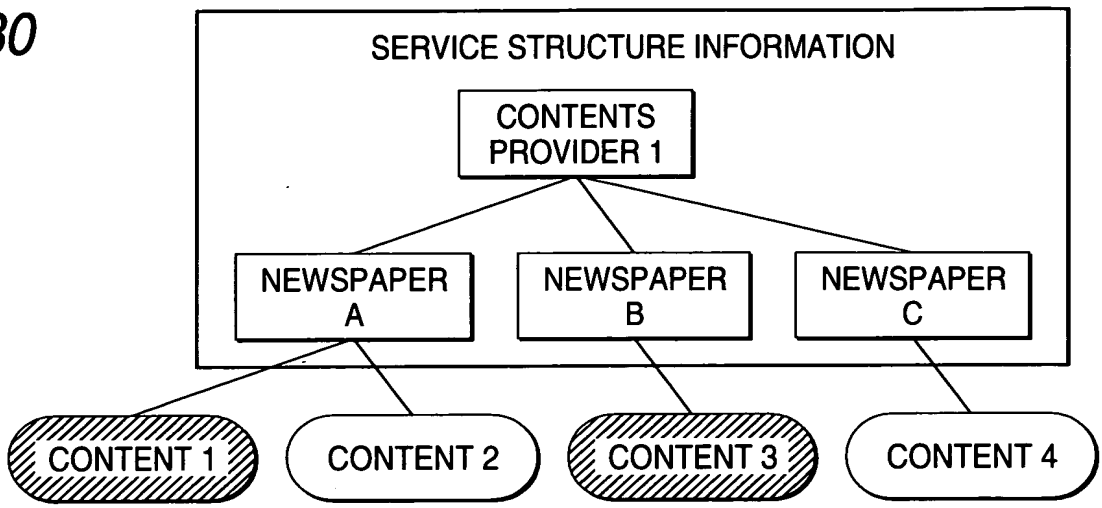


FIG. 31

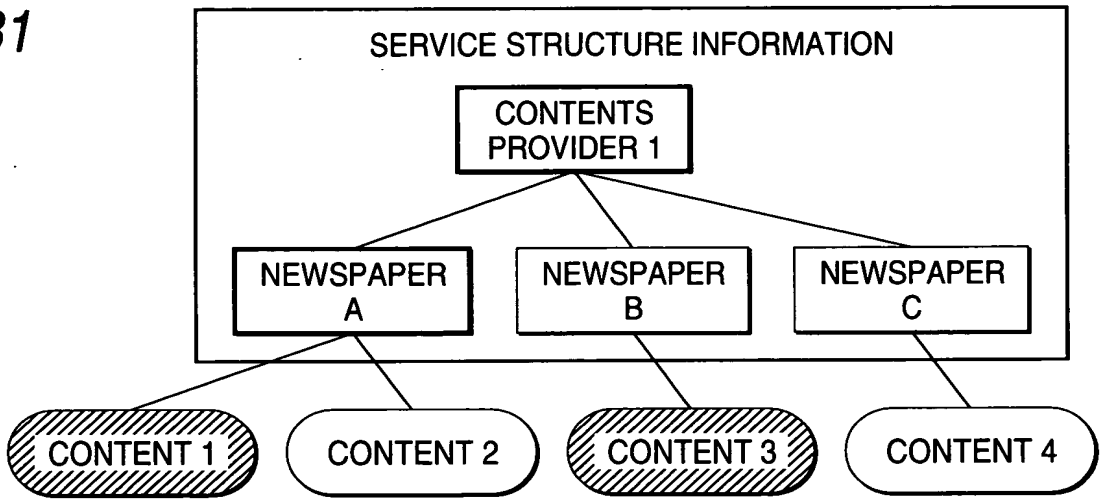


FIG. 32

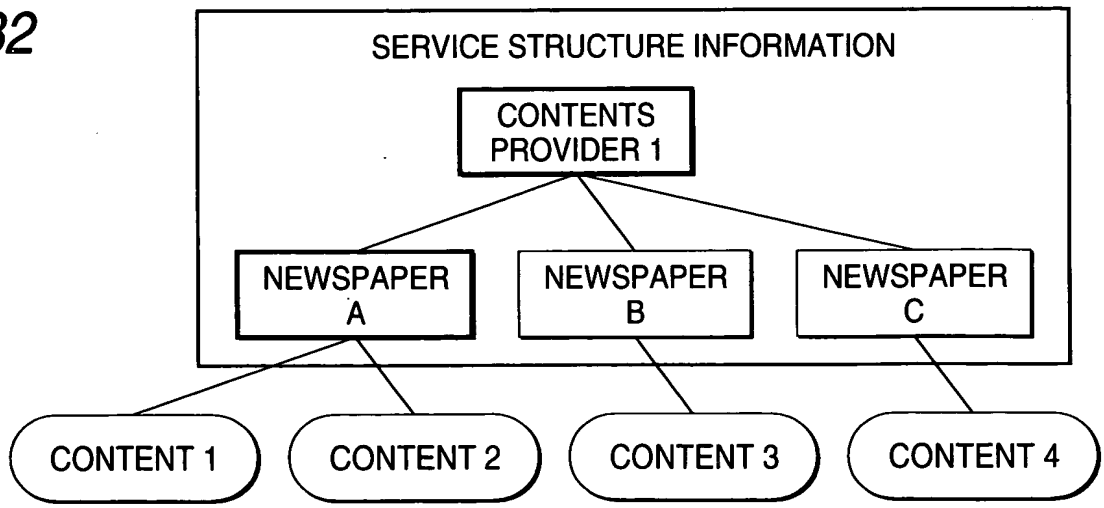


FIG. 33

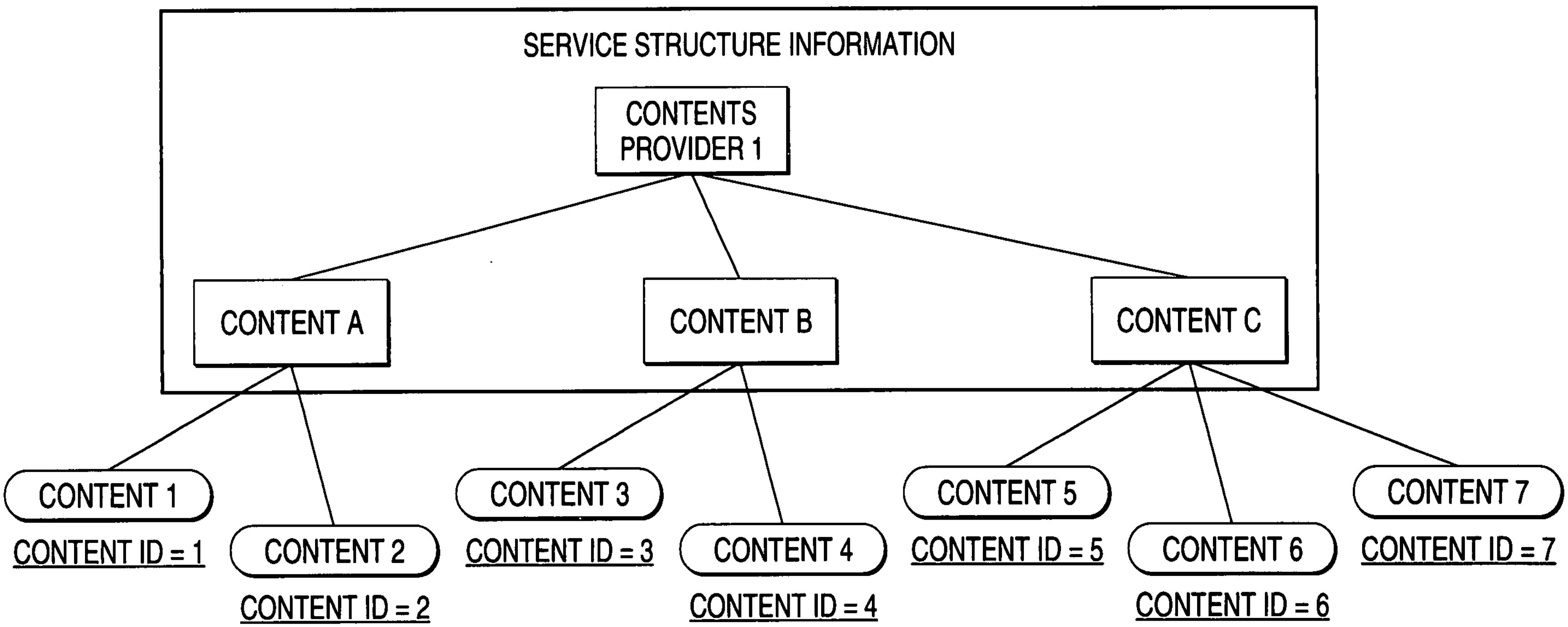


FIG. 34

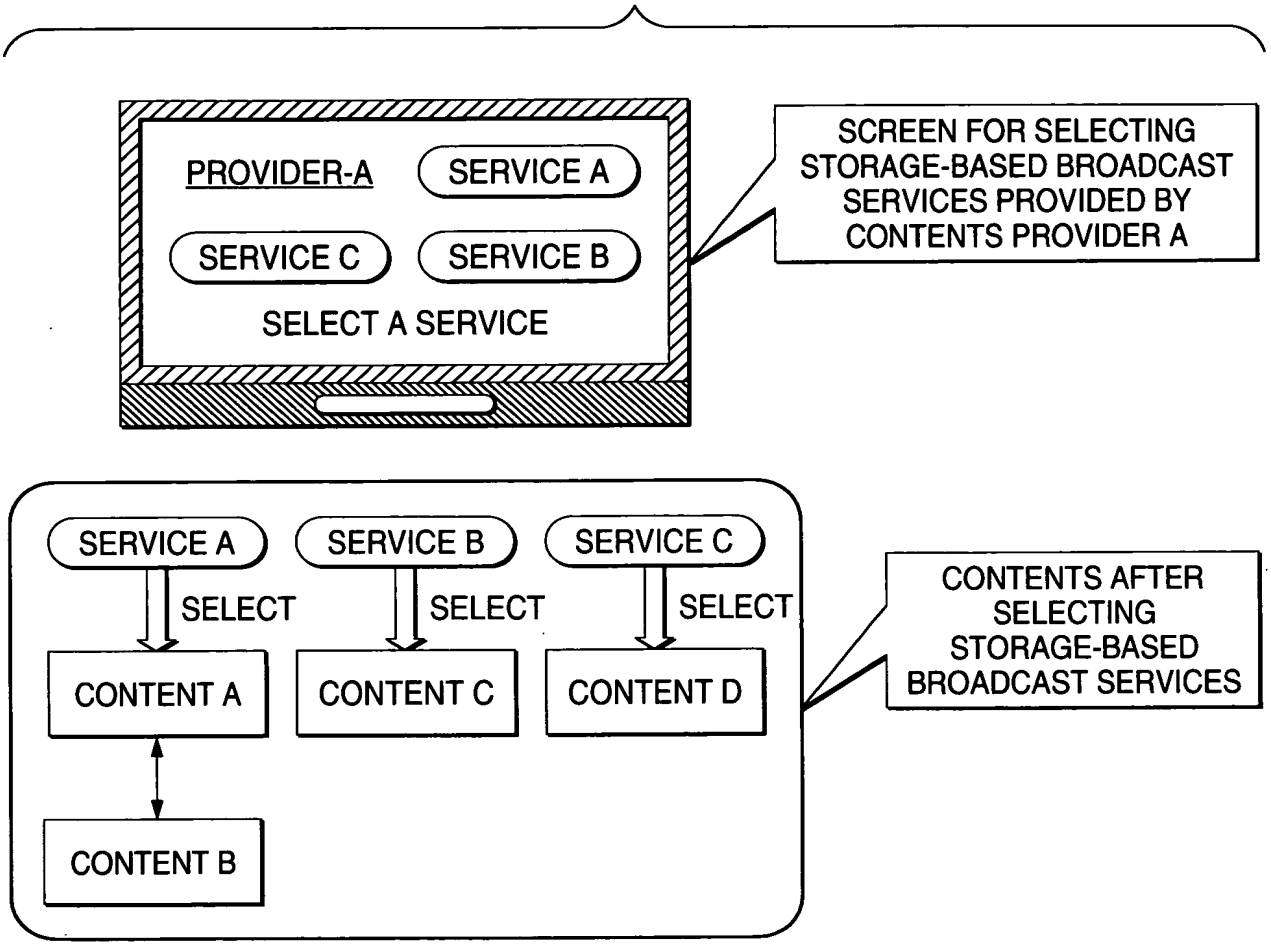

PROVIDER-A
SERVICE A
SERVICE C
SERVICE B
SELECT A SERVICE
SCREEN FOR SELECTING STORAGE-BASED BROADCAST SERVICES PROVIDED BY CONTENTS PROVIDER A
SERVICE A
SERVICE B
SERVICE C
SELECT
SELECT
SELECT
CONTENT A
CONTENT C
CONTENT D
CONTENT B
CONTENTS AFTER SELECTING STORAGE-BASED BROADCAST SERVICES

FIG. 35

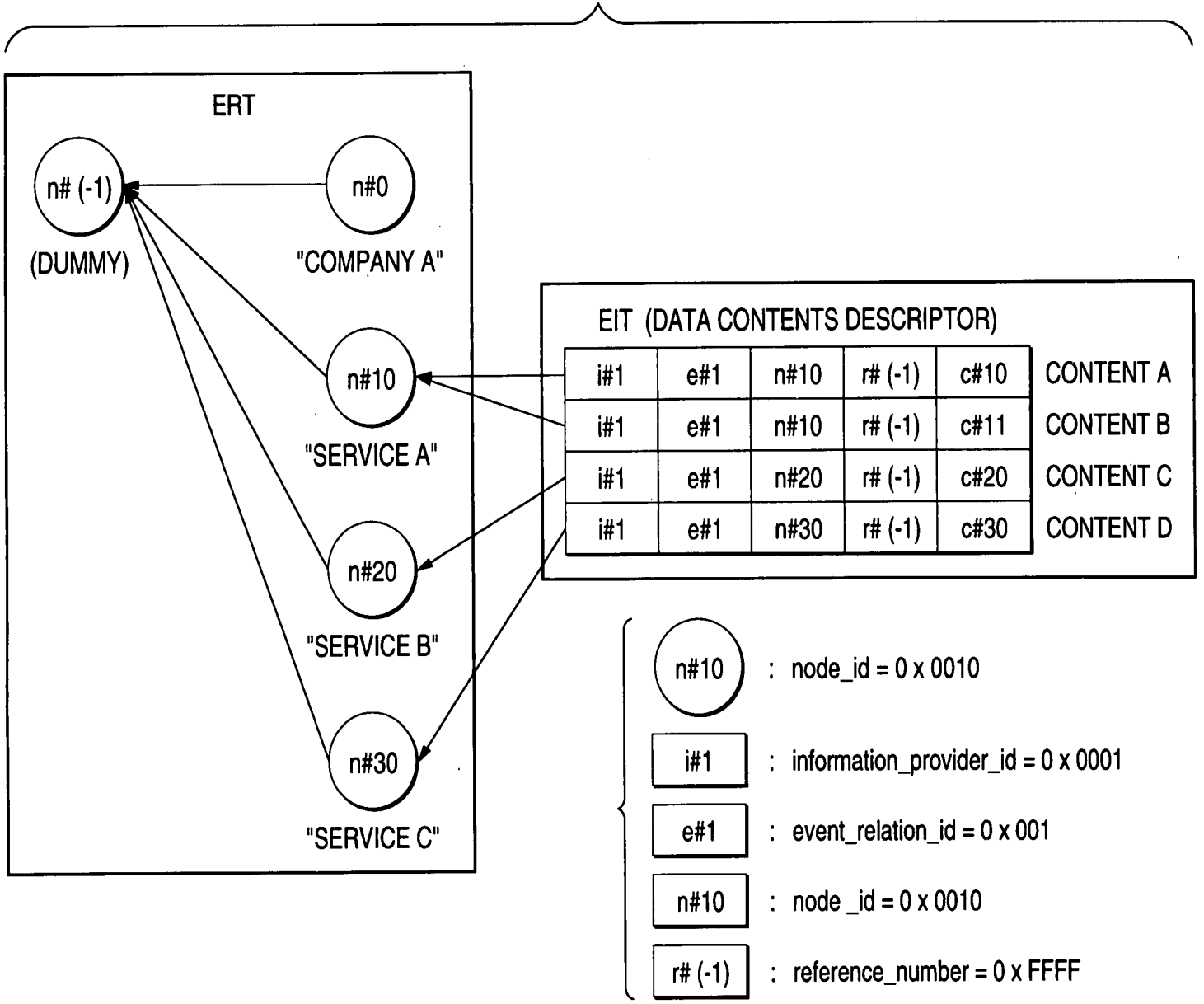

ERT
n# (-1)
(DUMMY)
n#0
"COMPANY A"
n#10
"SERVICE A"
n#20
"SERVICE B"
n#30
"SERVICE C"
EIT (DATA CONTENTS DESCRIPTOR)
i#1 e#1 n#10 r# (-1) c#10 CONTENT A
i#1 e#1 n#10 r# (-1) c#11 CONTENT B
i#1 e#1 n#20 r# (-1) c#20 CONTENT C
i#1 e#1 n#30 r# (-1) c#30 CONTENT D
n#10 : node_id = 0 x 0010
i#1 : information_provider_id = 0 x 0001
e#1 : event_relation_id = 0 x 001
n#10 : node _id = 0 x 0010
r# (-1) : reference_number = 0 x FFFF

FIG. 36

FLAG	DEFINITION
INFORMATION PROVIDER IDENTIFIER OF COMPANY A (Information_provider_id)	0 x 0001
SERVICE PROVIDED A service (node_id)	0 x 0010
SERVICE PROVIDED B service (node_id)	0 x 0020
SERVICE PROVIDED C service (node_id)	0 x 0030
REFERENCE OF CONTENT A (information_provider_id)	0 x 0001
REFERENCE OF CONTENT A (event_relation_id)	0 x 0001
REFERENCE OF CONTENT A (node_id)	0 x 0010
REFERENCE OF CONTENT B (information_provider_id)	0 x 0001
REFERENCE OF CONTENT B (event_relation_id)	0 x 0001
REFERENCE OF CONTENT B (node_id)	0 x 0010
REFERENCE OF CONTENT C (information_provider_id)	0 x 0001
REFERENCE OF CONTENT C (event_relation_id)	0 x 0001
REFERENCE OF CONTENT C (node_id)	0 x 0020
REFERENCE OF CONTENT D (information_provider_id)	0 x 0001
REFERENCE OF CONTENT D (event_relation_id)	0 x 0001
REFERENCE OF CONTENT D (node_id)	0 x 0030

FIG. 37

DATA STRUCTURE	DESCRIPTION
event_relation_section(){	
table_id	0 x D1 (PROGRAM GROUP INDEX: ERT)
section_syntax_indicator	1
reserved	
section_length	
event_relation_id	0 x 0001 (STORAGE-BASED BROADCAST SERVICE)
reserved	
version_number	
current_next_indicator	
section_number	
last_section_number	
information_provider_id	0 x 0001 (IDENTIFICATION VALUE ASSIGNED TO COMPANY A)
relation_type	0 x 3 (SERVICE DESCRIPTION)
reserved_future_use	
node_id	0 x 0000
collection_mode	0 x 0 (SET)
reserved_future_use	
parent_node_id	0 x FFFF (MULTI-ROUTE NODE)
reference_number	0 x FFFF (INVALID)
reserved_future_use	
descriptors_loop_length	
descriptor_tag	0 x D3 (SHORT FORM NODE INFORMATION DESCRIPTOR)
descriptor_length	
ISO_639_language_code	"jpn"
node_name_length	
node_name	"COMPANY A"
text_length	
text_char	ARBITRARY
node_id	0 x 0010
collection_mode	0 x 0 (SET)
reserved_future_use	
parent_node_id	0 x FFFF (MULTI-ROUTE NODE)
reference_number	0 x FFFF (INVALID)
reserved_future_use	
descriptors_loop_length	
descriptor_tag	0 x D3 (SHORT FORM NODE INFORMATION DESCRIPTOR)
descriptor_length	
ISO_639_language_code	"jpn"
node_name_length	
node_name	"SERVICE A"
text_length	
text_char	ARBITRARY
node_id	0 x 0020
collection_mode	0 x 0 (SET)
reserved_future_use	
parent_node_id	0 x FFFF (MULTI-ROUTE NODE)
reference_number	0 x FFFF (INVALID)
reserved_future_use	
descriptors_loop_length	
descriptor_tag	0 x D3 (SHORT FORM NODE INFORMATION DESCRIPTOR)
descriptor_length	
ISO_639_language_code	"jpn"
node_name_length	
node_name	"SERVICE B"
text_length	
text_char	ARBITRARY
node_id	0 x 0030 (SET)
collection_mode	
reserved_future_use	0 x FFFF (MULTI-ROUTE NODE)
parent_node_id	0 x FFFF (INVALID)
reference_number	
reserved_future_use	
descriptors_loop_length	
descriptor_tag	0 x D3 (SHORT FORM NODE INFORMATION DESCRIPTOR)
descriptor_length	
ISO_639_language_code	"jpn"
node_name_length	
node_name	"SERVICE C"
text_length	
text_char	ARBITRARY
CRC_32	
}	

FIG. 38

FLAG	DEFINITION
CONTENT A OF SERVICE A (content_id)	0 x 0010
CONTENT B OF SERVICE A (content_id)	0 x 0011
CONTENT C OF SERVICE B (content_id)	0 x 0020
CONTENT D OF SERVICE C (content_id)	0 x 0030

FIG. 39

DATA STRUCTURE	DESCRIPTION
reference_descriptor(){	
descriptor_tag	0 x D1 (REFERENCE DESCRIPTOR)
descriptor_length	TOTAL BYTE LENGTH OF ALL THE SUBSEQUENT DESCRIPTORS
information_provider_id	0 x 0001 (IDENTIFICATION VALUE ASSIGNED TO COMPANY A)
event_relation_id	0 x 0001 (STORAGE-BASED BROADCASET SERVICE)
reference_node_id	0 x 0010 (SERVICE A)
reference_number	0 x FF (NOT USED)
last_reference_number	0 x FF (NOT USED)
}	

FIG. 40

DATA STRUCTURE	DESCRIPTION
reference_descriptor(){	
descriptor_tag	0 x D1 (REFERENCE DESCRIPTOR)
descriptor_length	TOTAL BYTE LENGTH OF ALL THE SUBSEQUENT DESCRIPTORS
information_provider_id	0 x 0001 (IDENTIFICATION VALUE ASSIGNED TO COMPANY A)
event_relation_id	0 x 0001 (STORAGE-BASED BROADCASET SERVICE)
reference_node_id	0 x 0020 (SERVICE B)
reference_number_id	0 x FF (NOT USED)
last_reference_number	0 x FF (NOT USED)
}	

FIG. 41

DATA STRUCTURE	DESCRIPTION
reference_descriptor(){	
descriptor_tag	0 x D1 (REFERENCE DESCRIPTOR)
descriptor_length	TOTAL BYTE LENGTH OF ALL THE SUBSEQUENT DESCRIPTORS
information_provider_id	0 x 0001 (IDENTIFICATION VALUE ASSIGNED TO COMPANY A)
event_relation_id	0 x 0001 (STORAGE-BASED BROADCASET SERVICE)
reference_node_id	0 x 0030 (SERVICE C)
reference_number	0 x FF (NOT USED)
last_reference_number	0 x FF (NOT USED)
}	

FIG. 42

DATA STRUCTURE	NUMBER OF BITS	BIT STRING NOTATION
arib_bxml_info(){		
transmission_format	2	bslbf
reserved_future_use	1	bslbf
auto_start_flag	1	bslbf
document_resolution	4	bslbf
use_xml	1	bslbf
default_version_flag	1	bslbf
independent_flag	1	bslbf
content_id_flag	1	bslbf
reserved_future_use	3	bslbf
update_flag	1	bslbf
ISO_639_language_code	24	bslbf
if (content_id_flag==1){		
content_id	32	uimsbf
content_version	16	uimsbf
}		
if (default_version_flag==0){		
bml_major_version	16	uimsbf
bml_minor_version	16	uimsbf
if (use_xml==1){		
bxml_major_version	16	uimsbf
bxml_minor_version	16	uimsbf
}		
}		
if (transmission_format=='00){		
num_of_carousels	8	uimsbf
for(i=0;i<N;i++){		
component_tag	8	uimsbf
event_section_flag	1	
reserved_future_use	3	
component_size_flag	1	
default_transaction_id_flag	1	
default_timeout_DII_flag	1	
default_leak_rate_flag	1	
if (component_size_flag=='1'){		
component_size	32	uimsbf
}		
if (default_transation_id_flag)		
{		
transaction_id	32	uimsbf
}		
if (default_timeout_DII_flag){		
timeout_value_DII	32	uimsbf
}		
if (default_leak_rate_flag){		
leak_rate	22	uimsbf
reserved	2	bslbf
}		
}		
ondemand_reserved_flag	1	bslbf
file_storable_flag	1	bslbf
content_provider_flag	1	bslbf
reserved_future_use	5	bslbf
if (file_storable_flag=0){		
auto_storage_flag	1	bslbf
content_storage_type	4	uimsbf
reserved_future_use	3	bslbf
}		
if (content_provider_flag=1){		
content_provider_descriptors_length	12	uimsbf
reserved_future_use	4	bslbf
for (i=0;i<2N;i++){		
descriptors()		
}		
}		
}		

FIG. 43

FLAG	DEFINITION
STORAGE-BASED BROADCAST SERVICE IDENTIFIER (ERT: event_relation_id)	0 x 0001
SERVICE DESCRIPTION (ERT: relation_type)	0 x 3

FIG. 44

DATA STRUCTURE	NUMBER OF BITS	BIT STRING NOTATION
event_information_section(){		
table_id	8	uimsbf
section_syntax_indicator	1	bslbf
reserved_future_use	1	bslbf
reserved	2	bslbf
section_length	12	uimsbf
service_id	16	uimsbf
reserved	2	bslbf
version_number	5	uimsbf
current_next_indicator	1	bslbf
section_number	8	uimsbf
last_section_number	8	uimsbf
transport_stream_id	16	uimsbf
original_network_id	16	uimsbf
segment_last_section_number	8	uimsbf
last_table_id	8	uimsbf
for(i=0;i<N;i++){		
event_id	16	uimsbf
start_time	40	bslbf
duration	24	uimsbf
running_status	3	uimsbf
free_CA_mode	1	bslbf
descriptors_loop_length	12	uimsbf
for(i=0;i<N;i++){		
descriptor()		
}		
}		
CRC_32		
}	32	rpchof

FIG. 45

DATA STRUCTURE	NUMBER OF BITS	BIT STRING NOTATION
data_content_descriptor(){		
descriptor_tag	8	uimsbf
descriptor_length	8	uimsbf
data_component_id	16	uimsbf
entry_component	8	uimsbf
selector_length	8	uimsbf
for(i=0;i<N;i++){		
selector_byte	8	uimsbf
}		
num_of_component_ref	8	uimsbf
for(i=0;i<num_of_component_ref;i++){		
component_ref	8	uimsbf
}		
ISO_639_language_code	24	bslbf
text_length	8	uimsbf
for(i=0;i<N;i++){		
text_char	8	uimsbf
}		
}		

FIG. 46

DATA STRUCTURE	NUMBER OF BITS	BIT STRING NOTATION
event_relation_section(){		
table_id	8	uimsbf
section_syntax_indicator	1	bslbf
reserved_future_use	1	bslbf
reserved	2	bslbf
section_length	12	uimsbf
event_relation_id	16	uimsbf
reserved	2	bslbf
version_number	5	uimsbf
current_next_indicator	1	bslbf
section_number	8	uimsbf
last_section_number	8	uimsbf
information_provider_id	16	uimsbf
relation_type	4	uimsbf
reserved_future_use	4	bslbf
for(i=0;i<N;i++){		
node_id	16	uimsbf
collection_mode	4	uimsbf
reserved_future_use	4	bslbf
parent_node_id	16	uimsbf
reference_number	8	uimsbf
reserved_future_use	4	bslbf
descriptors_loop_length	12	uimsbf
for(i=0;i<N;i++){		
descriptor()		
}		
}		
CRC_32		
}	32	rpchof

FIG. 47

DATA STRUCTURE	NUMBER OF BITS	BIT STRING NOTATION
reference_descriptor(){		
descriptor_tag	8	uimsbf
descriptor_length	8	uimsbf
information_provider_id	16	uimsbf
event_relation_id	16	uimsbf
for(i=0;i<N;i++){		
reference_node_id	16	uimsbf
reference_number	8	uimsbf
last_reference_number	8	uimsbf
}		
}		